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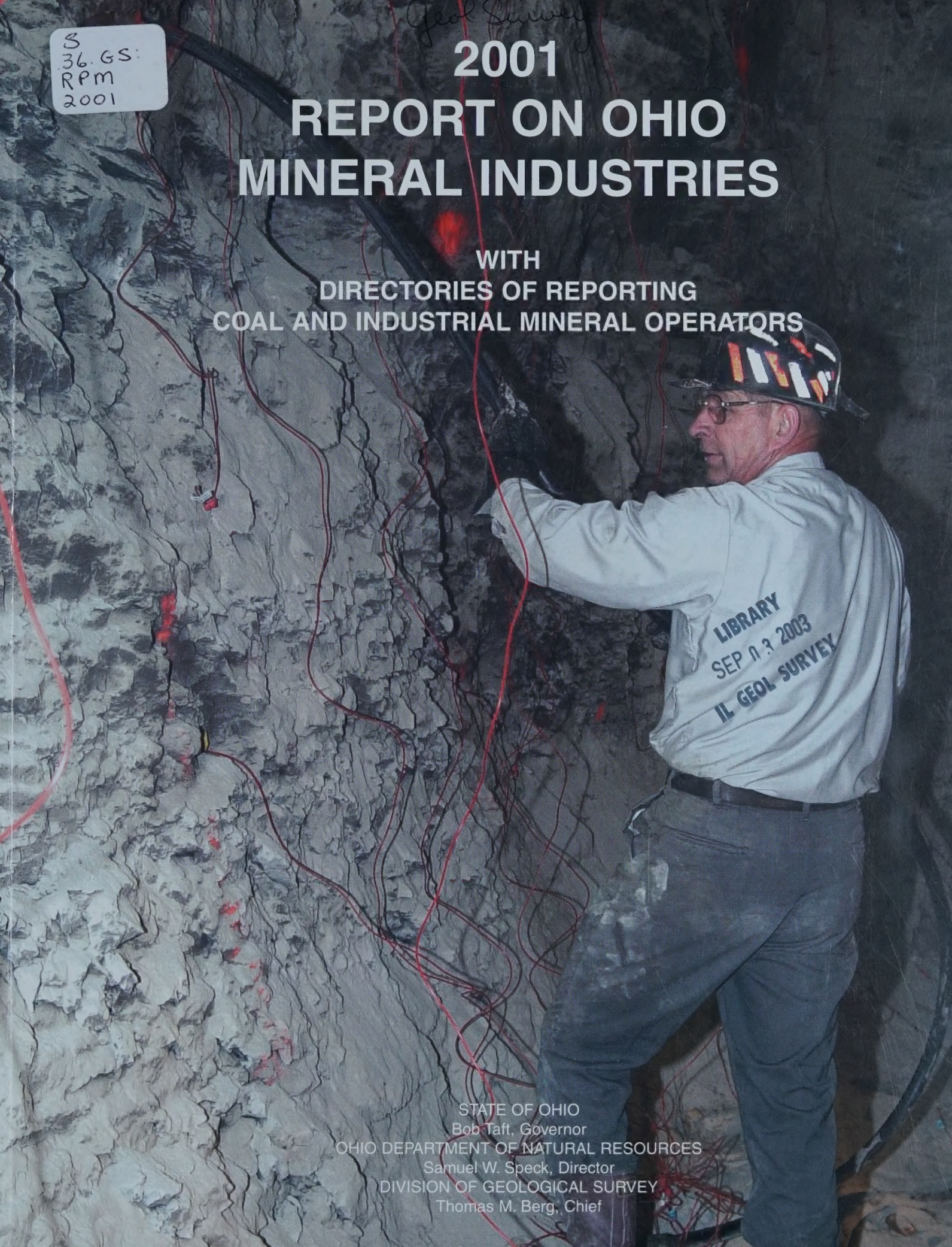
2001 REPORT ON OHIO MINERAL INDUSTRIES

WITH DIRECTORIES OF REPORTING COAL AND INDUSTRIAL MINERAL OPERATORS



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2001 REPORT ON OHIO MINERAL INDUSTRIES

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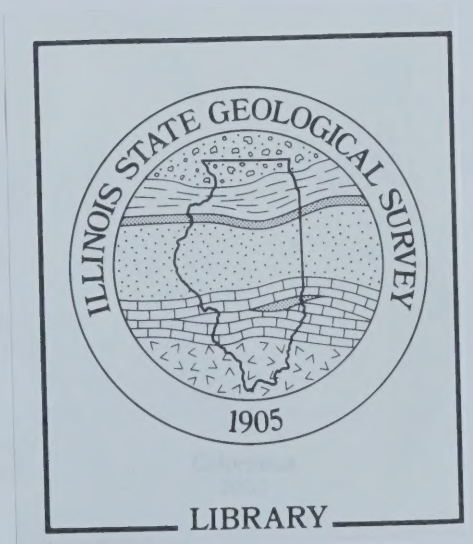
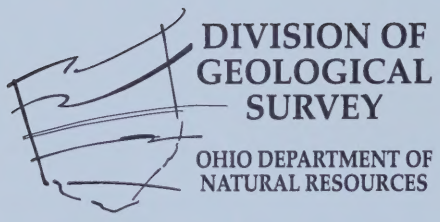
COAL AND INDUSTRIAL MINERAL OPERATORS

compiled by

Mark E. Wolfe





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Cover photo: Harold Oesch loads shot holes with explosives at the East Fairfield Coal Co. underground limestone mine in Mahoning County. Compressed air is used to blow the explosive (ANFO, an ammonium nitrate and fuel oil mixture) through a 1-inch-diameter hose into the hole. The booster and blasting cap have already been installed at the back of the 16-foot-deep hole prior to the hole being filled with the blasting agent. Each shot face creates 850 tons of aggregate from the Pennsylvanian-age Vanport limestone.

PREFACE

As Mark Wolfe points out in his foreword to this *2001 Report on Ohio mineral industries*, producers of coal, aggregates, oil and gas, and other minerals showed encouraging resiliency in 2001. As we watch the volatile world scene following the events of September 11, 2001, we wonder if that resiliency will continue. I certainly hope so. As a nation, we need to move aggressively toward energy independence. We need to be able to maintain and improve our transportation infrastructure. We need to be able to provide housing, hospitals, and schools for our citizens. All of that requires healthy and productive mineral industries.

The Ohio Department of Natural Resources, Division of Geological Survey has been providing the geologic information needed for intelligent mineral-resource decisions for more than 165 years. In the past decade, the Survey has moved vigorously toward providing that information in digital format and in a geographic information system (GIS) environment. In this information-technology age, we are able to provide geologic maps and geologic data faster and more efficiently than ever before. For example, based on our new 3-D surficial-materials mapping program, we can produce customized derivative maps showing specific mineral resources in a flash. For instance, we can now query the 3-D database for the Lorain 1:100,000-scale surficial-materials map and produce a map of all sand and gravel bodies greater than 20 feet thick, no matter whether they are at the surface or buried beneath thick till deposits.

As economic conditions allow, the Ohio Geological Survey will continue to move ahead in making geologic information, maps, and derivative products available in digital format. The benefits of moving into the digital world are worth the investment. We will be better able to serve the mineral industries and all Ohioans with greater effectiveness and efficiency. We hope that a more stable economy will prevail.

Thomas M. Berg
State Geologist & Chief

FOREWORD

The mineral industries of Ohio displayed remarkable resiliency in 2001, particularly in light of the national recession. Ohio coal production increased 14.7 percent in 2001 compared to 2000. The total value of Ohio industrial minerals increased 1.3 percent, primarily due to continued strength in aggregate production. Approximately 20 percent more oil and gas wells were drilled in Ohio during 2001 compared to 2000. Economic challenges were overcome by innovation, productivity increases, and the positive work ethic that is prevalent in the Ohio mineral industry.

This year's article, "Salt deposits of Ohio—geology, mining, and uses," by Thomas E. Tomastik, Senior Geologist with the Ohio Department of Natural Resources, Division of Mineral Resources Management, highlights the importance and long history of the salt industry in Ohio. Ohio has been a national leader in salt production since the large underground mines at Cleveland and Fairport Harbor were opened more than 40 years ago. The salt produced is used primarily for ice control, which is vital to keeping weather-related disruptions to business in the northern U.S. to a minimum.

We thank Tim Miller of East Fairfield Coal Co. for his cooperation in obtaining the photographs on the cover and interior of the *2001 Report on Ohio mineral industries*. The Report is truly a team effort. It would not be possible without the dedication of the following Ohio Division of Geological Survey employees: Douglas L. Crowell, Supervisor of the Coal and Industrial Minerals Group; Merrianne Hackathorn, Geologic Editor; Edward V. Kuehnle, Supervisor of the Cartography and Editing Group; Lisa Van Doren, Electronic Designer; and Joseph G. Wells, Database Administrator.

Your suggestions for future improvements to the *Report on Ohio mineral industries* are always welcome. The Ohio Division of Geological Survey continues to work toward a Web-based geographic information system (GIS) that will allow the public to easily access and manipulate the vast amount of geologic data available.

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SALT DEPOSITS OF OHIO—GEOLOGY, MINING, AND USES

by Thomas E. Tomastik, Geologist,
Ohio Department of Natural Resources,
Division of Mineral Resources Management

INTRODUCTION

What does the word "salt" mean to you? To most people, the word "salt" is associated with table salt used for seasoning food. To the rural person, it's the salt blocks for livestock or the water-softening salt used for their domestic water well. For the Ohio motorist, it means safer driving conditions in ice and snow.

Salt is the general term for naturally occurring sodium chloride (NaCl). Its mineral name is halite, and it is often referred to as rock salt. Halite or salt is easily recognized by its cubic crystal form and its taste; it is also very soluble in water.

Historically, natural brine springs or salt licks, such as the Scioto Saline in Jackson County (Hansen, 1995), were used by both man and animal as a source of salt for at least 8,000 years. From the late 1700's to the early 1800's, salt licks supported Ohio's early salt industry. The first natural brine well was drilled in Ohio in 1809. The natural brines were boiled in large kettles to evaporate the salt. The early natural brine/evaporation industry continued to operate in Ohio for many years. The Excelsior Salt Works in Pomeroy was still in operation in 1959. Today, however, naturally occurring brines as a source of salt have been replaced by Ohio's development of its underground salt deposits.

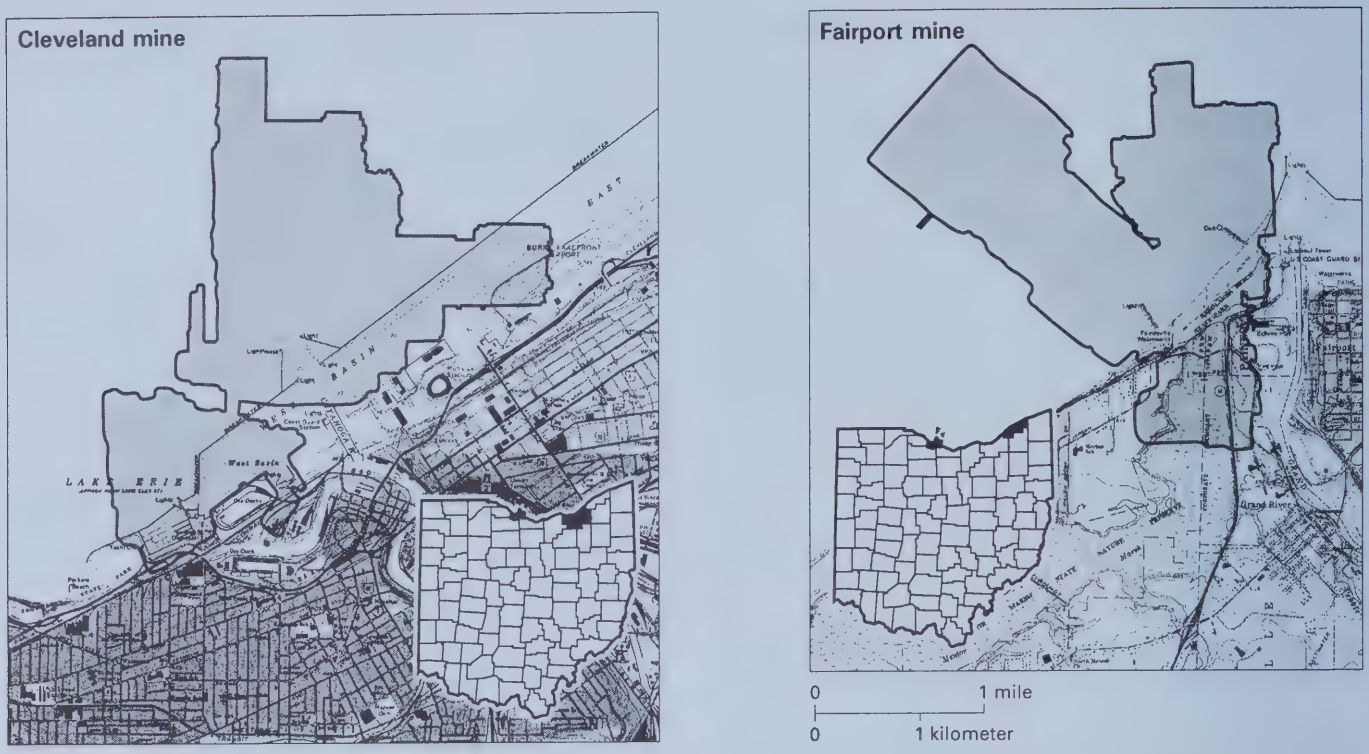
Since the discovery of rock salt in Cuyahoga County in 1886, Ohio salt production has relied on the solution-mining and underground-mining industries. The salt beds in Ohio also have been used for the underground storage of hydrocarbon products such as propane and butane.

In 1886, while drilling for natural gas at its rolling mill in Newburg, Ohio, the Cleveland Rolling Mill Company encountered rock salt at a depth of 1,990 feet (Orton, 1888, p. 53; Bownocker, 1906, p. 34; Cushing and others, 1931, p. 112). This discovery led to the creation of the Newburg Salt Company in 1889 and the establishment of the first artificial-brine operation in Ohio (Bownocker, 1906). Since 1889, nine salt-solution-mining facilities have operated in Ohio (see map). Approximately 251 salt-solution-mining wells have been drilled in Ohio at these nine facilities. In 2002, only two of these facilities and 44 wells remain in operation.

All the salt produced in Ohio prior to 1959 was from either natural brines or artificial brine produced by salt-solution mining (Kefauver, 1960). In 1959, the Morton Salt Company opened the Fairport mine, the first of two underground rock-salt mines beneath Lake Erie in northern Ohio. The Fairport mine is currently operated by the Morton Salt Division of Rohm and Haas, Inc.; its surface operation is on the shoreline of Lake Erie on the west side of the mouth of the Grand River in Fairport Harbor (Lake County). In 1961, the International Salt Company opened the Cleveland mine. Its surface operation is on Whiskey Island at the mouth of the Cuyahoga River along the Lake Erie shore in Cleveland. The Cleveland mine has had several owners and is currently owned and operated by Cargill, Inc. Both Morton and Cargill lease thousands of acres beneath the bed of Lake Erie (see illustration) from the State of Ohio and pay royalties to the State.

1 United Salt Company
2 Union Salt Company
3 Cleveland Salt Company
4 Diamond Shamrock Chemical Corporation
5 RMI Company
6 Wadsworth Salt Company
7 Cargill, Inc.
8 Morton Salt Division of Rohm and Haas, Inc.
9 PPG Industries, Inc.

Location of artificial-brining facilities that have operated in Ohio since 1889. Only the Cargill (7) and Morton (8) operations are still active.



Location (left, Cleveland mine; right, Fairport mine) and extent of underground salt mines in Ohio. (Extent of mines from 7.5-minute maps of abandoned underground mines on file at the Division of Geological Survey.)

GEOLOGY OF OHIO'S SALT DEPOSITS

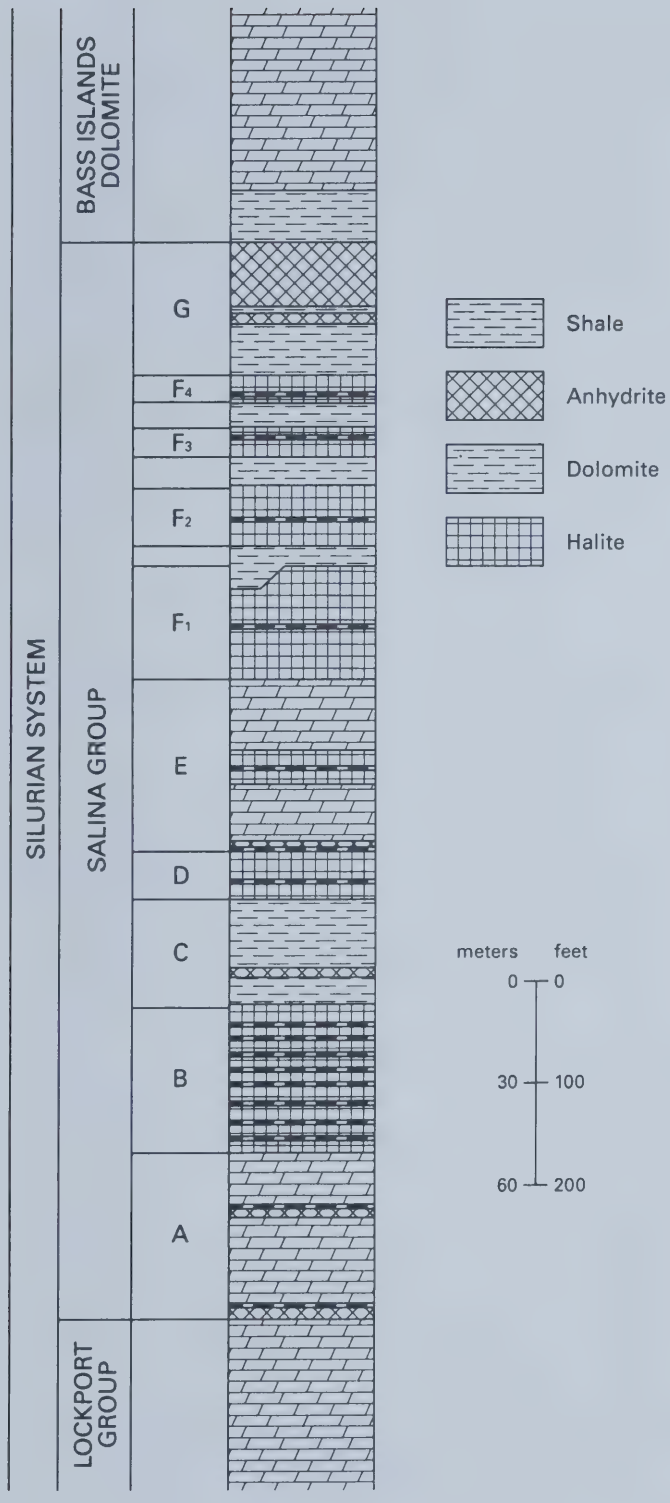
Salt is classified as an evaporite, "a nonclastic sedimentary rock composed primarily of minerals produced from a saline solution as a result of extensive or total evaporation of the solvent" (Jackson, 1997). Other common evaporite minerals in Ohio are gypsum (see Wolfe, 2001) and anhydrite.

In Ohio, bedded salt occurs within the Upper Silurian Salina Group. The Salina Group underlies most of the state, but the salt beds are restricted to the eastern one-third (Hall, 1963; Clifford, 1973; Hansen, 1983). The Salina Group is subdivided into seven units in Ohio, which are labeled A through G, in ascending order (see stratigraphic column). The G unit, the uppermost unit, is capped by a thick anhydrite but is predominantly shale. The C unit is composed principally of gray to green anhydritic and dolomitic shale. The A unit, the lowermost unit, commonly is composed of dolomite, bedded anhydrite, and shale. In 1996, a significant discovery was made in Ohio regarding the A unit. Janssens and Grubaugh (1996), while investigating the northern end of the Cambridge Arch, discovered salt in the A unit in parts of Cuyahoga, Lorain, and Medina Counties. This discovery is believed to be the first documented occurrence of salt in the A unit outside the Michigan Basin.

Extent of the salt-bearing Salina Group in the Appalachian and Michigan Basins (from Hansen, 1983).

Salt is present in the B, D, and F units and also may be present to a minor extent in the E unit. Both underground salt mines in northeastern Ohio produce salt from the F unit, which is further subdivided in Ohio into four salt beds, F1 through F4. Depths to the top of the salt beds in Ohio range from 1,350 feet in Lorain County to more than 6,500 feet in Belmont County along the Ohio-Pennsylvania border (Clifford, 1973, p. 2). Individual salt beds rarely exceed 100 feet in thickness; cumulative salt thickness in the Salina Group generally ranges between 140 and 325 feet (Tomastik, 1997, p. 237).

Evaporites have been deposited in a wide variety of



Generalized stratigraphic section of the Salina Group in Ohio (from Hansen, 1983).

geologic settings, including: (1) coastal intertidal and supratidal environments (sabkhas), (2) coastal lagoons, and (3) large basins in which brine levels fluctuated (Kendall, 1984). The term "sabkha" is defined as "a supratidal environment of sedimentation, formed under arid to semiarid conditions on restricted coastal plains just above normal high-tide level" (Jackson, 1997).

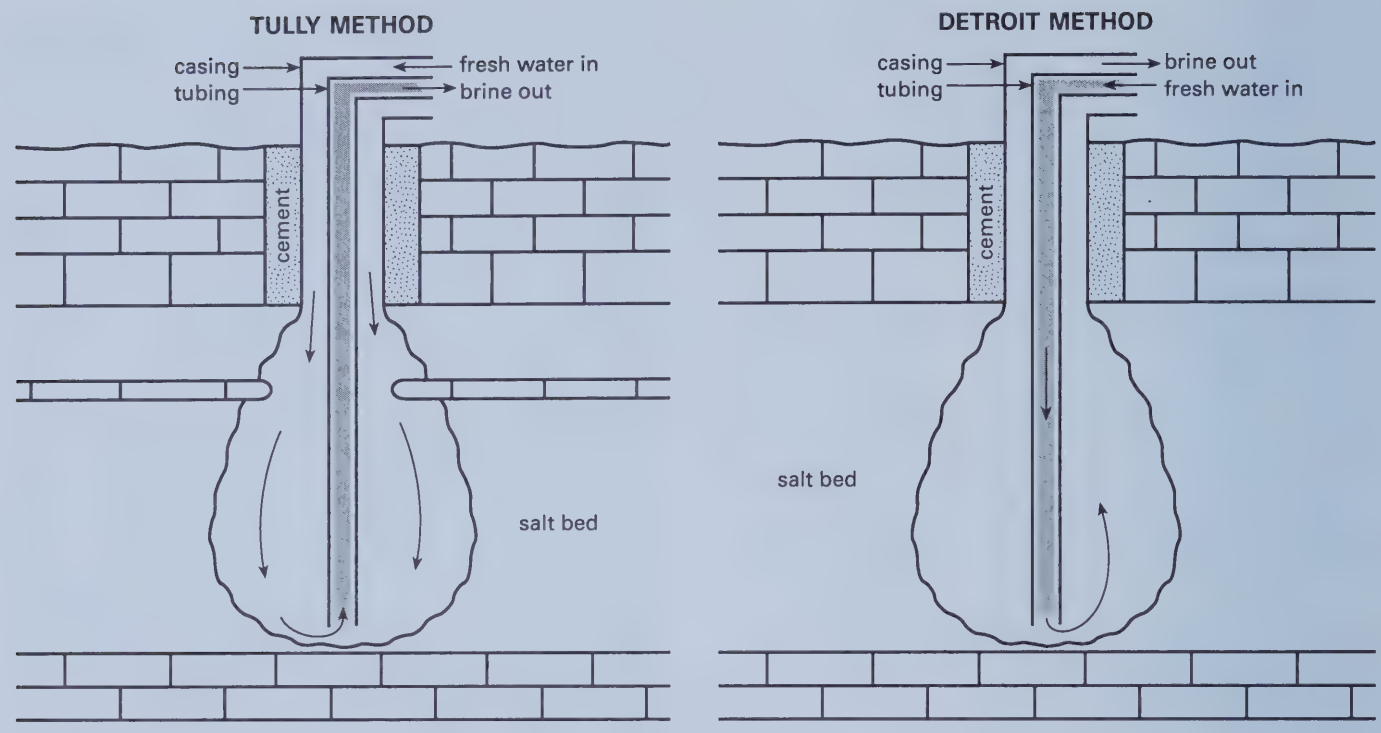
For a number of years, there has been a major controversy in regard to the origin and deposition of evaporite deposits in Ohio. Two schools of thought have developed on this issue: one group supports a moderate to deep-water barred-basin model; the other group believes evaporites are of shallow-water or sabkha origin. On the basis of sedimentological and diagenetic features observed in Ohio cores, Tomastik (1997) concluded that the Salina salt beds in Ohio were deposited in relatively shallow water that was indicative of sabkha environments.

SOLUTION MINING OF SALT

In the solution-mining process, bedded salt deposits are dissolved by the injection of water, either under pressure or by gravity, into the salt beds (Bays and Associates, 1959). The saline water is then returned to the surface, where it is evaporated to extract the dissolved salt. As the injection process continues, an underground cavity or cavern is created in the salt beds (see illustrations). The first solution-mining wells in Ohio were of simple construction. Historically, at least until the 1930's or 1940's, the two primary methods used in the solution mining of bedded salt deposits were called the Tully plan and the Detroit plan (Trump, 1944). In the Tully plan, water is injected down the annular space between the casing and tubing placed inside the casing. The saline water is then forced to the surface through the tubing (Trump, 1944; Butler, 1949). The Tully plan is often referred to as "top-injection," "casing-injection," "direct-circulation," or "top-water-injection." The Detroit plan is the reverse of the Tully plan: water is injected down the tubing and the brine is brought to the surface through the annular space (Trump, 1944; Butler, 1949). This type of operation commonly is referred to as "bottom-water injection," "reverse-circulation," or "tubing injection."

In the top-injection method, after the solution-mining cavity has been created, water enters the cavity at or near the top, resulting in a greater driving force for dissolution of the salt near the top of the cavity (Solution Mining Research Institute, 1971). A very high percentage, perhaps 75 to 95 percent of dissolution, takes place in the upper 10 to 25 feet of the salt zone (Bays and Associates, 1959; Querio, 1986). Such a situation results in a "morning-glory" or inverted cone-shaped cavity (Bays and Associates, 1959; Solution Mining Research Institute, 1971; Querio, 1986). Although the top-injection method produces the greatest quantity of saturated brine, it also causes the most operating troubles, such as roof collapse and pipe shearing (Butler, 1949).

The bottom-injection method produces a more desirably shaped cavity, but in thin salt beds, the production rate is considerably reduced (Butler, 1949; Querio, 1986). In the initial stage of development,



Illustrations of salt-solution mining methods (modified from Clifford, 1973).

dissolution takes place very rapidly because the salt surface area and water volume is very high (Solution Mining Research Institute, 1971). Even in very early stages of bottom injection, water having low concentrations of salt rises rapidly along the tubing and gains most of its salt saturation by dissolution of the salt near or at the roof on the updip side of the solution-mining well in bedded salt deposits (Bays and Associates, 1959).

Historically, once individual solution-mining well cavities had coalesced into one another, they were then operated as a multiple-well system and tubing was re-

SOLUTION-MINING OPERATIONS IN OHIO

Company name	Location	Operational dates	Other information
United Salt Company	Newburg, Cuyahoga County	1889-1902	
Union Salt Company	Cleveland, Cuyahoga County	1890-1948	
Wadsworth Salt Company	Wadsworth, Medina County	1892-1930's or early 1940's	
Morton Salt Division, Rohm and Haas, Inc.	Rittman, Wayne County	1898-present	originally operated as Ohio Salt Company
PPG Industries, Inc.	Barberton, Summit County	1899-1983	originally operated as Columbia Chemical Company, then Southern Alkali Corporation, and Columbia-Southern Alkali Corporation
Cleveland Salt Company	Cleveland, Cuyahoga County	1900-1910's or early 1920's	
Cargill, Inc.	Akron, Summit County	1901-present	originally operated as Colonial Salt Company, then Diamond Crystal Salt Company, and Akzo Salt, Inc.
Diamond Shamrock Chemical Corporation	Painesville, Lake County	1910-1976	originally operated as Diamond Alkali Company
RMI Company	Ashtabula, Ashtabula County	1984-1992	

moved from one of the wells. This well was then used as a "casing injector" to supply the water to the other producing wells now connected to a common cavity. Casing injection was not a good practice from an operating standpoint as it resulted in the equivalent of a top-injection operation (Butler, 1949). Today, salt-solution-mining wells normally are operated as two-well galleries and the wells are connected by hydraulic fracturing, natural coalescence, or horizontal drilling.

Of the nine solution-mining operations that have operated in Ohio, only Morton Salt and Cargill are currently active. A complete description and history of these projects can be reviewed in the Ohio Department of Natural Resources, Division of Mineral Resources Management 1993 publication entitled "Investigation of active and abandoned Class III salt solution-mining projects in Ohio."

UNDERGROUND MINING OF SALT

Preliminary exploration for the underground mining of salt in Ohio began in the early 1950's, when the Morton Salt Company and the International Salt Company drilled exploration wells in Lake and Cuyahoga Counties, respectively. Core samples were taken of the Salina salt deposits to determine the quality and quantity of the salt. Morton and International then obtained mineral rights leases from the State of Ohio that extend approximately 2 miles out from the shoreline beneath the bed of Lake Erie.

The following information is from copies of brochures printed by the Morton Salt Company and on file at the Ohio Division of Geological Survey. Work began on the Fairport mine in June 1956 and continued 24 hours a day, six days a week for almost three years. The first 80 feet of the mine were excavated by crane, but the rest of the 2,025-foot-deep production shaft was excavated using dynamite. The production shaft is 16 feet in diameter, and a second service shaft is 12 feet in diameter. The shafts were lined with reinforced concrete. In the Fairport mine, the F1 salt (see photo) is mined by the room-and-pillar method (see photo); 50 percent of the salt is left in place to act as a support (pillar) for the overlying rock. The room height of the Fairport mine averages about 18 feet. Temperatures in this mine range between 63° and 78°F, depending on the season.

Most of the vehicles and mining machinery in the Fairport mine were disassembled at the surface and taken underground in pieces to be reassembled. All equipment repairs are performed underground. The working face in the mine is undercut with mining machinery, then the salt is broken up by blasting. The loose salt is gathered by a loading machine and hauled to a preliminary crushing and screening operation. After this process, the salt is dumped into a storage bin. Large containers called skips are filled with salt from the storage bins and are hoisted to the surface in the production shaft by steel cables that wind over pulleys and extend into the hoist house at the surface. After the salt reaches the surface, it is dumped into bins near the headframe for further processing. Salt was first shipped from the Fairport mine in 1959. Between 1990 and 2000, the Fairport mine averaged 1.2 million tons of salt in annual sales; 2001 sales totaled 1.5 million tons.

Close-up view of the Salina F unit salt.

View of a room and pillars in the Morton Salt Division Fairport mine.

Undercutting of salt in the Cargill, Inc., Cleveland mine.

The International Salt Company began construction of the Cleveland mine on Whiskey Island in 1957, and salt shipments from Cleveland began in 1961. The Cleveland mine also uses the room-and-pillar method. The undercutting (see photo) and blasting techniques are very similar to the mining operations at the Morton Fairport mine. The Cleveland mine has two, 16-foot-diameter shafts; the production shaft is 1,897 feet deep. Room height is about 20 feet. The International Salt Company was purchased by Akzo America in 1973. In 1989, the name was changed to Akzo-Nobel Salt (Gayle Petrick, Akzo-Nobel Salt, written commun., 1991). Cargill, Inc., purchased the Cleveland mine from Akzo-Nobel in 1997.

The Cleveland mine currently extracts Salina salt from what the company calls the B-bed of the three salt beds in the mine (Tim Harter, Cargill, Inc., written commun., 2002). The B-bed is 37 feet thick. All three salt beds correlate to the Salina F1 and F2 salt units. The upper A-bed is not mined due to poor quality. The lower C-bed is approximately 32 feet thick. In early 1994, Akzo started a continuous-mining operation in the C-bed. This operation ceased in the summer of 1998 (Tim Harter, personal commun., 2002). Between 1990 and 2000, the Cleveland mine sold an average of 2.0 million tons of salt annually; 2001 sales totaled 2.0 million tons.

UNDERGROUND STORAGE IN SALT BEDS

Underground storage of hydrocarbon products in Ohio's salt deposits began in 1960. Only three underground storage areas have operated in Ohio (see map). A total of 30 wells have been permitted for hydrocarbon storage since 1960, but only 11 wells have actually been used. Of these 11 wells, only two wells at the Marathon-Ashland Petroleum facility remain in operation. Both the Standard Oil Company and Marathon-Ashland Petroleum wells were new wells drilled and completed in the Salina salt beds for

1 Standard Oil Company
2 Marathon-Ashland Petroleum LLC
3 Lake Underground Storage Corporation

Location of underground hydrocarbon-storage projects in the Salina Group in Ohio. Only the Marathon-Ashland operation (2) is still active.

hydrocarbon storage. The Lake Underground Storage operation converted existing Diamond Shamrock cavities and solution-mining wells to propane storage. In addition, in 1966, the Ohio Fuel Gas Company created an experimental storage site to study the feasibility of storing natural gas in a salt cavern. This site was located in Ohio Fuel Gas's conventional natural gas storage field in Medina County.

USES OF SALT

Of all of our basic commodities, none surpasses salt in terms of its thousands of uses. The average person who thinks of salt just as a seasoning for food does not realize the many uses it really has. Salt is used for production of metallic sodium, chlorine, caustic soda, soda ash, and in many chemical processes. Salt is used as a domestic water softener, animal salt blocks, food preservative, de-icing agent, dust suppressant, stabilizing agent, carrier for trace minerals, in medicines, and for hide curing. However, the majority of salt produced in Ohio is used for snow and ice control.

SALT PRODUCTION

In 2001, Ohio produced 4.5 million tons of salt (see p. 36), an increase of 6 percent from 2000. The value

UNDERGROUND HYDROCARBON STORAGE FACILITIES IN OHIO

Company name	Location	Operational dates	Storage product
Standard Oil Company	Cleveland, Cuyahoga County	1960-1983	propane
Marathon-Ashland Petroleum LLC	Canton, Stark County	1960-present	butane
Lake Underground Storage Corporation	Painesville, Lake County	1973-1983	propane

of the salt sold in 2001 was $89.8 million. Approximately 80 percent of the salt produced in Ohio in 2001 came from the two underground mines beneath Lake Erie. Nationally, Ohio ranks fourth in the production of salt. Salt will continue to be an important commodity in Ohio's and the nation's future.

ACKNOWLEDGMENTS

I thank Tim Harter, manager of the Cargill, Inc., Cleveland mine, for providing historical information on the operations of the mine. I extend my sincere appreciation to Mark Wolfe and Ron Rea of the Ohio Division of Geological Survey for providing many interesting historical documents on the salt industry in Ohio.

REFERENCES CITED

Bays, C. A., and Associates, Inc., 1959, Training conference compendium of solution extraction and brine production: Notes and compilations prepared for use solely by training conference participants: French Lick, Indiana, January, 1959, 52 p., with attachments.

Bownocker, J. A., 1906, Salt deposits and the salt industry in Ohio: Ohio Division of Geological Survey Bulletin 8, 42 p.

Butler, C. A., Jr., 1949, Design of wells to supply salt to chemical plants: The Petroleum Engineer, March 1949, p. B40-B48.

Clifford, M. J., 1973, Silurian rock salt of Ohio: Ohio Division of Geological Survey Report of Investigations 90, 42 p.

Cushing, H .P., Leverett, Frank, and Van Horn, F. R., 1931, Geology and mineral of the Cleveland District, Ohio: U.S. Geological Survey Bulletin 818, 138 p.

Hall, J. F., 1963, Distribution of salt in Ohio, in Bersticker, A. C. Hoekstra, K. E., and Hall, J. F., eds., First Symposium on Salt: Cleveland, Ohio, The Northern Ohio Geological Society, Inc., p. 27-30.

Hansen, M. C., 1983, Ohio's salt industry: Ohio Division of Geological Survey, Ohio Geology Newsletter, Fall 1983, p. 1-6.

_____ 1995, The Scioto Saline—Ohio's early salt industry: Ohio Division of Geological Survey, GeoFacts 7, one sheet.

Jackson, J. A., ed., 1997, Glossary of geology (4th ed.): Falls Church, Virginia, American Geological Institute, 769 p.

Janssens, Arie, and Grubaugh, W. A., 1996, Subsurface evidence suggesting a northern terminus of Cambridge arch in Wayne County, Ohio, in Riley, R. A., Hull, D. N., Neese, M. A., Blomberg, J. R., Tomastik, T. E., and Berg, T. M., eds., Ohio Geological Society Fourth Annual Technical Symposium: Akron, Ohio, p. 38-57.

Kefauver, Hazel, 1960, Ohio's salt industry establishes four firsts in 1959, in Annual coal and nonmetallic mineral report with directories of reporting firms, for 1959: Ohio Department of Industrial Relations, Division of Mines, p. 176-186.

Kendall, A. C., 1984, Evaporites, in Walker, R. G., ed., Facies models: Geoscience Canada Reprint Series 1, 2nd ed., p. 259-296.

Orton, Edward, 1888, The Berea grit as a source of oil and gas in Ohio: Ohio Division of Geological Survey, v. VI, Economic Geology, p. 311-409.

Querio, C. W., 1986, Solution mining of salt, the technology and its application: London, Ontario, Ontario Petroleum Institute, 25th Annual Conference, 19 p.

Solution Mining Research Institute (SMRI), 1971, Solution mining research—organizations, objectives, and fundamental studies of the Solution Mining Research Institute: 70 p.

Tomastik, T. E., 1997, The sedimentology of the Bass Islands and Salina Groups in Ohio and its effect on salt-solution mining and underground storage, USA: Carbonates and Evaporites, v. 12, p. 236-253.

Trump, E. N., 1944, Mining soluble salines by wells: American Institute of Mining and Metallurgical Engineers, Inc., Mining Technology, Technical Publication 1733, 7 p.

Wolfe, M. E., 2001, Gypsum in Ohio, in Wolfe, M. E., ed., 2000 Report on Ohio mineral industries with directories of reporting coal and industrial mineral operators, Ohio Division of Geological Survey, p. 1-5.

Donny Collins uses a Fletcher roof-bolter to bolt the 42-inch-thick roof (caprock) in the East Fairfield Coal Co. underground limestone mine in Mahoning County. Two rows of bolts are normally placed down the center of the entry, but the pattern will be expanded as needed to control the roof. The roof-bolter installs 8-foot-long fully grouted resin bolts. A combination grout-tension bolt up to 15 feet long can be used if severe roof problems are encountered.

2001 OHIO MINING ACTIVITIES IN BRIEF

Reports were filed in 2001 for 181 coal-mining operations, including 5 mines with their own coal-washing facility. Coal production was reported from 111 of these 181 operations. Reports also were filed for 26 separate coal-washing plants and associated facilities. Of 731 industrial-mineral-mining operations known to be operating in 2001, 495 operations were active. A total of 45 mines reported production of multiple mineral commodities. Of this total, 39 mines reported production of multiple industrial minerals, including 9 mines reporting production of multiple industrial minerals and coal; 6 mines reported production of coal and one industrial mineral. There were 600 new wells completed for oil and gas in 2001, of which 512 were productive and 88 were dry.

The total value[1] of coal was $616,869,859 in 2001; the value of oil and gas was $573,581,386; and the total value[1] of all nonfuel industrial minerals was $802,217,295 in 2001.

[1]Includes reported and estimated values. Some operations reporting sales did not report a value for those sales. A countywide- or statewide-average price per ton was calculated for each industrial mineral commodity based on sales for which the value was reported. A countywide average price per ton was calculated for coal based on sales for which the value was reported and method of production. These calculated averages were used to estimate the value of the sales for which the actual values were not reported.

TABLE 1.—*2001 Mineral sales and production in Ohio*

Commodity	Sales[1]	Production[2]	Value[3]	Change in value from 2000 (percent)
Coal	25,245,833 tons	25,790,543 tons	$616,869,859	+9.5
Limestone and dolomite	80,998,236 tons	81,944,288 tons	$395,585,481	+7.8
Sand and gravel	56,829,272 tons	56,848,867 tons	$263,845,940	+4.5
Salt	4,261,545 tons	4,518,513 tons	$89,840,924	-8.1
Sandstone and conglomerate	1,768,701 tons	1,940,869 tons	$38,460,128	-14.7
Clay	1,730,151 tons	1,730,172 tons	$7,648,956	-24.4
Shale	1,528,067 tons	1,494,767 tons	$5,366,308	-28.8
Gypsum	117,003 tons	117,003 tons	$1,469,558	-27.5
Peat	0 tons	0 tons	$0	
Gas	[4]	98,255,015 MCF[5]	$441,459,782	+10.5
Oil	[4]	6,049,524 barrels	$132,121,604	-24.9

[1]Includes material for captive use.
[2]The production figures for the industrial minerals are estimates. Many operators do not know actual production. Some operators report estimates, other operators do not report any production. For those operators who do not report production, production is assumed to equal sales.
[3]The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton calculated on reported FOB values.
[4]Figure not available.
[5]Thousand cubic feet.

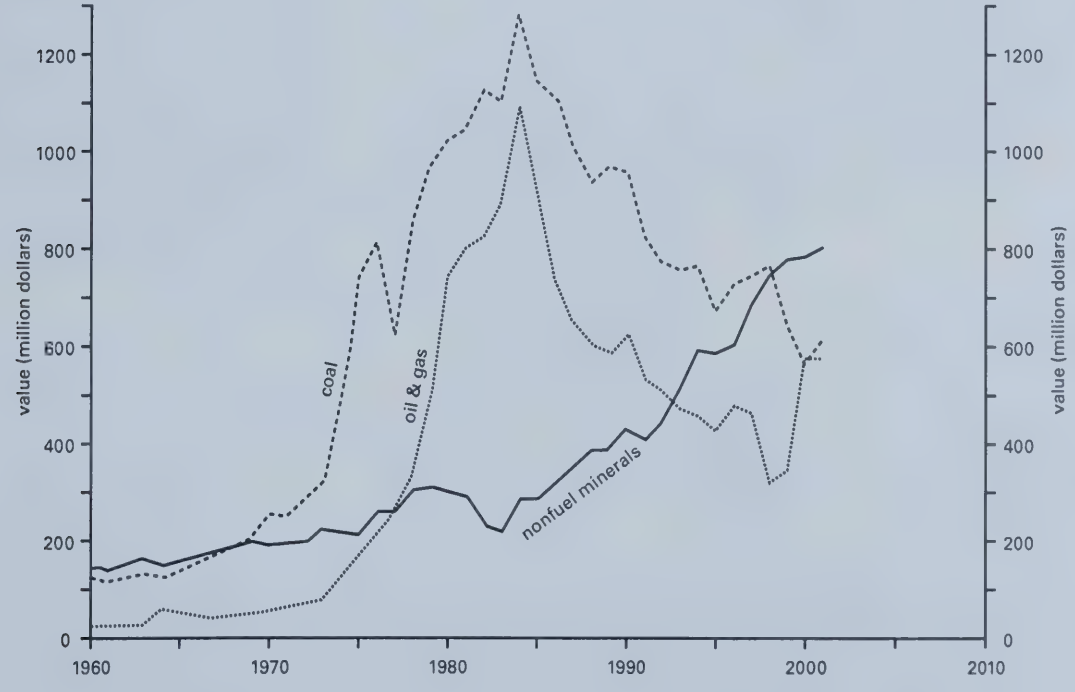


FIGURE 1.—Value of coal, nonfuel minerals, and oil and gas in Ohio.

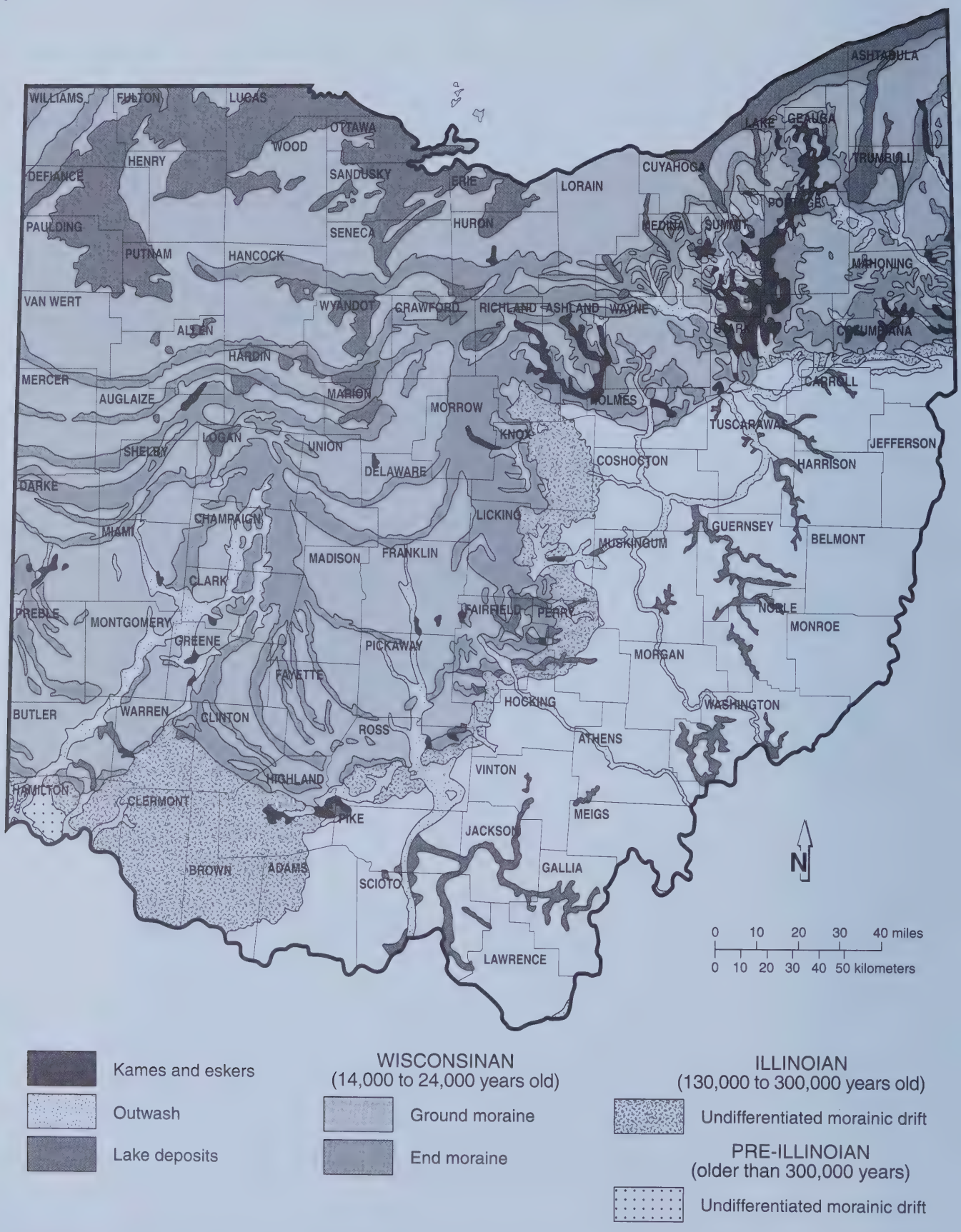


FIGURE 2.—Generalized map of the glacial deposits of Ohio. Continental glaciers advanced over the Ohio landscape several times during the Ice Age. These glaciers deposited unconsolidated materials on top of the bedrock over nearly two-thirds of the state. Most of Ohio's sand and gravel production comes from kames, eskers, and outwash, which were deposited by meltwater from the glaciers. Other glacially derived industrial minerals in Ohio include peat and clay.

FIGURE 3.—Generalized geologic map of Ohio. Mineral production occurs throughout Ohio and from every geologic system from the Cambrian to the Permian. Coal, limestone and dolomite, sandstone and conglomerate, shale, clay, gypsum, salt, and oil and gas are produced from Ohio bedrock.

COAL

Coal was produced by 41 companies at 111 mines in 21 Ohio counties during 2001. Production increased 14.7 percent from 2000, totaling 25,790,543 tons in 2001; 12,524,691 tons (48.6 percent of total production) were produced at 102 surface mines, and 13,265,852 tons (51.4 percent of total production) were produced at 10 underground mines. In 2001, tonnage from underground production exceeded tonnage from surface production, continuing a trend that began in 1995. Of 26 coal-producing states, Ohio ranked 14th in 2001. The top five states, in descending order of production, are Wyoming (366.3 million tons), West Virginia (160.6 million tons), Kentucky (129.3 million tons), Pennsylvania (74.5 million tons), and Texas (47.7 million tons). These five states produced 69.8 percent of the nation's coal in 2001. Ohio produced 2.3 percent of the nation's coal in 2001. The top five coal-consuming states, in descending order of consumption, are Texas, Indiana, Ohio, Missouri and Michigan. These five states used 28.1 percent of the total coal consumed by all 50 states in 2001.[2]

In comparison to 2000, 1 more mine reported production of greater than 1,000,000 tons, 3 more mine produced between 50,000 and 500,000 tons, and 5 fewer mines produced under 50,000 tons. There was a net decrease of 1 mine in 2001.

The five leading counties for 2001 production were Belmont, Meigs, Harrison, Vinton, and Jackson Counties; these counties produced 71.3 percent of the 2001 total production. A total of 25,245,833 tons of coal were sold in 2001; total value[3] was $616,869,859. The average price per ton of all coal sold was $24.43; surface-mined coal averaged $20.20 per ton and underground-mined coal averaged $28.51.

In underground mining, 61.4 percent of the coal was produced by longwall mining and 38.6 percent was mined by continuous miner; no coal was produced by conventional mining in 2001. In surface operations, 94.0 percent of the coal was mined by conventional surface methods, and 6.0 percent was auger mined.

The Pittsburgh (No. 8) coal was the most heavily mined seam, followed by the Clarion (No. 4A), Middle Kittanning (No. 6), Meigs Creek (No. 9), and Lower Freeport (No. 6A) seams. Coal produced from these five seams constituted 84.8 percent of the total 2001 production.

A total of 14,863,125 tons of washed coal was reported in 2001. Reports from 11 coal-washing plants indicate an average 41.8 percent loss in washing.

Trucking was the primary means of coal disposition, carrying 49.0 percent of the total sales. Conveyor belts carried 22.9 percent, rail transported 22.7 percent, and water carried 5.3 percent of the coal sold in 2001. A total of 440,324 tons (1.7 percent) of the coal produced was reported as stored.

The total average annual employment reported in 2001 was 2,720 employees; 1,587 of these were production employees. Production employees worked an average of 173 days producing coal in 2001. The average annual wage earned by all production employees was $47,086 based on those employees for whom wages were reported. The average annual wage for surface-mine production employees was $44,314, and the average annual wage for underground-mine production employees was $49,897. Wages earned by all employees totaled $142,480,613 in 2001.

[2]Information from U.S. Department of Energy, Energy Information Administration.

[3]Includes reported and estimated values. See footnote 1, p. 9.

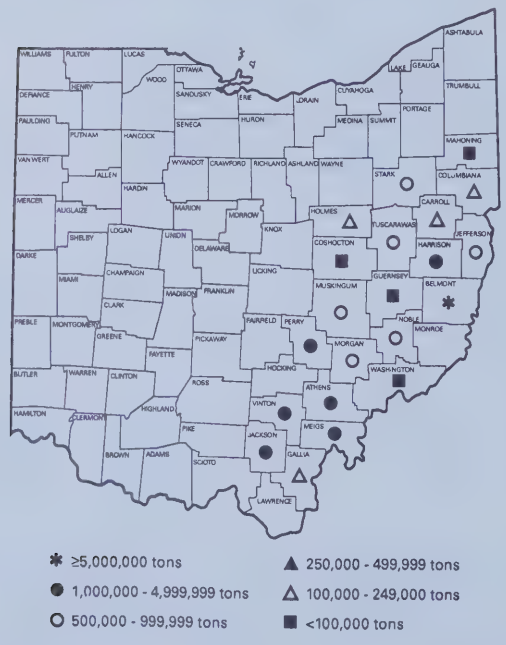


FIGURE 4.—Coal production in Ohio in 2001, by county.

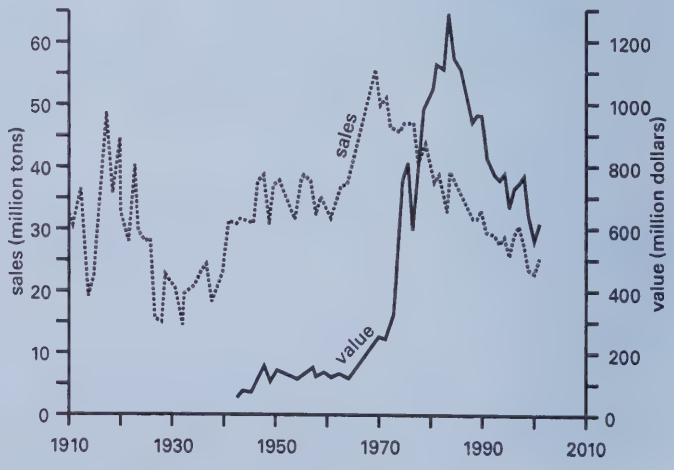


FIGURE 5.—Sales and value of coal in Ohio.

TABLE 2.—*2001 Ohio coal production and sales by county, in descending order of production*

County	Production (short tons)	Sales (short tons)
Belmont	7,629,057	7,622,867
Meigs	4,291,350	4,245,535
Harrison	3,544,834	3,058,424
Vinton	1,628,756	1,628,756
Jackson	1,305,575	1,305,575
Athens	1,248,192	1,241,897
Perry	1,052,138	1,052,138
Jefferson	912,273	912,273
Tuscarawas	784,425	784,425
Muskingum	701,248	701,248
Stark	696,906	696,906
Noble	578,262	578,262
Morgan	537,469	537,469
Gallia	221,057	221,057
Columbiana	215,778	215,778
Holmes	141,190	141,190
Carroll	114,263	114,263
Washington	98,752	98,752
Coshocton	63,816	63,816
Mahoning	16,875	16,875
Guernsey	8,327	8,327
21 counties	25,790,543	25,245,833

TABLE 3.—*2001 Ohio coal production by production-size group and change from 2000*

Production-size group	2001		Change from 2000 (short tons)
	Number of mines reporting	Production (short tons)	
1,000,000 tons and over	6	13,265,581	+1,520,559
500,000 to 999,999 tons	5	3,466,315	+109,429
250,000 to 499,999 tons	11	3,807,004	+1,817,670
100,000 to 249,999 tons	21	3,262,413	+104,048
50,000 to 99,999 tons	13	980,382	-145,536
25,000 to 49,999 tons	19	679,815	+154,653
Under 25,000 tons	37	329,033	-248,828
TOTAL	112	25,790,543	+3,311,995

TABLE 4.—*2001 Ohio coal production by county and mining method*

County[1]	All methods (short tons)	Total number of mines	Underground				Surface			
			Number of underground mines reporting	Production (short tons)			Number of surface mines reporting	Production (short tons)		
				Total underground	Longwall	Continuous miner		Total surface	Strip	Auger
Athens	1,248,192	1	1	1,248,192		1,248,192				
Belmont	7,629,057	23[2]	2	5,092,506	4,122,158	970,348	21[2]	2,536,551	2,124,782	411,769
Carroll	114,263	3					3	114,263	98,828	15,435
Columbiana	215,778	6	1	1,900		1,900	5	213,878	185,671	28,207
Coshocton	63,816	2					2	63,816	63,816	
Gallia	221,057	2					2	221,057	221,057	
Guernsey	8,327	1					1	8,327	4,445	3,882
Harrison	3,544,834	10	1	2,062,614		2,062,614	9	1,482,220	1,399,162	83,058
Holmes	141,190	1					1	141,190	141,190	
Jackson	1,305,575	4					4	1,305,575	1,305,575	
Jefferson	912,273	10	3	569,290		569,290	7	342,983	323,696	19,287
Mahoning	16,875	3					3	16,875	16,875	
Meigs	4,291,350	2	2	4,291,350	4,029,146	262,204				
Morgan	537,469	1[3]					1[3]	537,469	532,681	4,788
Muskingum	701,248	3					3	701,248	647,902	53,346
Noble	578,262	6					6	578,262	577,116	1,146
Perry	1,052,138	1					1	1,052,138	1,052,138	
Stark	696,906	8					8	696,906	696,906	
Tuscarawas	784,425	19					19	784,425	659,767	124,658
Vinton	1,628,756	6[2]					6[3]	1,628,756	1,628,756	
Washington	98,752	1					1	98,752	98,752	
TOTAL	25,790,543	112	10	13,265,852	8,151,304	5,114,548	102	12,524,691	11,779,115	745,576

[1]Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.
[2]Does not include mines extending into this county from adjoining counties.
[3]This mine extends into Morgan County from Noble County and is not included in the total number of mines.

TABLE 5.—*2001 Ohio coal production by county and month*

County[1]	Production (short tons)												
	Total annual	January	February	March	April	May	June	July	August	September	October	November	December
Athens	1,248,192	117,747	94,831	108,224	104,469	125,347	113,343	103,233	131,808	102,293	99,122	67,065	80,710
Belmont	7,629,057	695,393	510,286	608,817	548,927	634,595	615,192	650,082	642,697	613,211	773,653	631,184	705,020
Carroll	114,263	6,652	5,650	6,464	6,855	5,320	7,921	5,611	6,582	11,117	21,098	19,539	11,454
Columbiana	215,778	20,004	14,410	21,312	14,674	15,140	18,530	16,727	22,732	18,372	18,372	18,824	16,681
Coshocton	63,816	3,571	3,571	3,570	3,834	3,835	3,835	4,059	4,059	5,580	4,924	4,924	18,054
Gallia	221,057	17,002	14,488	9,470	19,442	10,490	21,093	27,125	26,237	24,655	14,008	17,533	19,514
Guernsey	8,327							52	1,099	1,542	1,704	1,973	1,957
Harrison	3,544,834	260,407	280,373	300,004	261,893	272,577	310,555	304,418	302,881	306,340	354,008	292,379	298,999
Holmes	141,190	16,664	16,664	16,664	10,408	10,408	10,408	11,162	11,162	11,161	8,830	8,830	8,829
Jackson	1,305,575	116,550	116,384	122,571	118,009	109,228	100,241	94,550	102,554	90,629	125,411	101,570	107,878
Jefferson	912,273	81,799	69,187	69,749	68,639	70,946	70,471	66,962	72,127	72,681	83,909	91,779	94,024
Mahoning	16,875	4,979	1,058	926	516			2,446	392	1,469	1,797	1,535	1,757
Meigs	4,291,350	303,562	413,844	403,115	496,949	472,009	343,390	366,342	517,100	335,237	382,961	71,865	184,976
Morgan	537,469	38,288	88,356					72,977	61,004	73,400	74,776	85,075	43,593
Muskingum	701,248	62,444	55,575	58,488	54,922	57,148	52,461	56,058	66,800	63,052	74,308	62,210	37,782
Noble	578,262	53,499	62,587	37,788	42,805	33,830	38,870	54,238	54,376	46,622	56,620	55,820	41,207
Perry	1,052,138	95,911	92,429	88,269	87,598	81,630	70,417	73,187	96,415	83,665	103,275	87,142	92,200
Stark	696,906	62,122	61,772	56,980	63,476	67,884	68,554	57,542	53,426	55,769	55,411	46,942	47,028
Tuscarawas	784,425	71,381	73,833	72,014	55,310	43,652	60,826	61,728	68,507	61,652	75,831	67,722	71,969
Vinton	1,628,756	129,472	126,482	135,426	130,321	145,074	130,730	129,428	137,484	128,498	150,614	143,737	141,490
Washington	98,752	6,815	8,443	7,409	6,352	8,068	8,057	8,014	9,902	7,896	10,646	6,255	10,895
TOTAL	25,790,543	2,164,262	2,110,223	2,127,260	2,095,399	2,167,181	2,044,894	2,165,941	2,389,344	2,114,841	2,491,278	1,883,903	2,036,017

[1]Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 6.—*2001 Ohio coal production*

County[1]	Production								
	Total	Upper Mercer (No. 3A)	Tionesta (No. 3B)	Brookville (No. 4)	Winters	Clarion (No. 4A)	Lower Kittanning (No. 5)	Strasburg (No. 5A)	Middle Kittanning (No. 6)
Athens	1,248,192								1,248,192
Belmont	7,629,057								
Carroll	114,263								
Columbiana	215,778						12,423		2,059
Coshocton	63,816								63,816
Gallia	221,057								205,564
Guernsey	8,327								8,327
Harrison	3,544,834								
Holmes	141,190								141,190
Jackson	1,305,575					507,226	449,774		336,778
Jefferson	912,273								
Mahoning	16,875			13,306			3,569		
Meigs	4,291,350					4,291,350			
Morgan	537,469								
Muskingum	701,248								690,240
Noble	578,262								
Perry	1,052,138						231,470		820,668
Stark	696,906			274,459			51,979		334,413
Tuscarawas	784,425	980	9,797	55,572			200,303	5,452	368,735
Vinton	1,628,756			371,474	139,238	408,884	292,337		238,135
Washington	98,752								
TOTAL	25,790,543	980	9,797	714,811	139,238	5,207,460	1,241,855	5,452	4,458,117

[1]Production from mines operating in more than one county was evenly split between the counties involved unless a by-county breakdown was provided by the operator.

Manufactured sand used in asphalt, concrete block, and pipe fill is being conveyed to storage at the processing facilities of the East Fairfield Coal Co. limestone mine in Mahoning County.

by county and seam

(short tons)

Lower Freeport (No. 6A)	Upper Freeport (No. 7)	Mahoning (No. 7A)	Harlem	Pittsburgh (No. 8)	Pomeroy-Redstone (No. 8A)	Meigs Creek (No. 9)	Waynesburg (No. 11)	County[1]
								Athens
				5,527,467	56,397	1,674,405	370,788	Belmont
		77,922	36,341					Carroll
	38,136	163,160						Columbiana
								Coshocton
	15,493							Gallia
								Guernsey
2,062,614				518,057	87,877	876,286		Harrison
								Holmes
	11,797							Jackson
	141,906	427,384		279,097	52,408	11,478		Jefferson
								Mahoning
								Meigs
						537,469		Morgan
11,008								Muskingum
						578,262		Noble
								Perry
36,055								Stark
4,638	138,948							Tuscarawas
	178,688							Vinton
						98,752		Washington
2,114,315	524,968	668,466	36,341	6,324,621	196,682	3,776,652	370,788	TOTAL

TABLE 7.—*2001 Disposition of Ohio coal, by county*

County[1]	Number of mines	Disposition[1] (short tons)						Stored
		Total[2]	Rail	Water	Truck	Conveyor	Unspecified/ other	
Athens	1	1,241,897	1,241,897					15,943
Belmont	23[3]	7,622,867	2,675,646	1,028,676	3,918,545			197,704
Carroll	3	114,263			114,263			
Columbiana	6	215,778			215,778			
Coshocton	2	63,816			63,816			
Gallia	2	221,057		5,939	44,074	171,044		
Guernsey	1	8,327			8,327			
Harrison	10	3,058,424	1,494,811	231,266	1,331,060		1,287	180,862
Holmes	1	141,190			141,190			
Jackson	4	1,305,575		11,580	960,529	333,466		
Jefferson	10	912,273		34,367	877,906			
Mahoning	3	16,875			16,875			
Meigs	2	4,245,535				4,245,535		45,815
Morgan	1[4]	537,469				537,469		
Muskingum	3	701,248			701,248			
Noble	6	578,262			548,301	29,961		
Perry	1	1,052,138	314,894		737,244			
Stark	8	696,906			696,906			
Tuscarawas	19	784,425			784,425			
Vinton	6[3]	1,628,756		16,433	1,139,064	473,259		
Washington	1	98,752			98,752			
TOTAL	112	25,245,833	5,727,248	1,328,261	12,398,303	5,790,734	1,287	440,324

[1]Tonnage of coal shipped from mines operating in more than one county was evenly split between the counties involved and type(s) of disposition reported unless a by-county breakdown was provided by the operator.
[2]Does not reflect tonnage stored. Reflects tonnage sold and shipped from mine.
[3]Does not include mines extending into this county from adjoining counties.
[4]This mine extends into Morgan County from Noble County and is not included in the total number of mines.

TABLE 8.—*2001 Rail shipments of Ohio coal, by county of origin and carrier*

County	Number of mines	Shipments (short tons)				
		Total	CSX	Wheeling & Lake Erie	Norfolk Southern	Ohio Central
Athens	1	1,241,897				1,241,897
Belmont	1	2,675,646			2,675,646	
Harrison	1	1,494,811	282,654	426,817	108,267	677,073
Perry	1	314,894				314,894
TOTAL	4	5,727,248	282,654	426,817	2,783,913	2,233,864

TABLE 9.—*2001 Washed Ohio coal*

		Raw coal (short tons)	Washed coal[1] (short tons)	Loss in washing (short tons)	Loss in washing (percent)	Percent of all washed coals
By type of mining	From surface mines	3,703,148	3,098,275	604,873	16.3	20.8
	From underground mines	21,854,718	11,764,850	10,089,868	46.2	79.2
	TOTAL	25,557,866	14,863,125	10,694,741	41.8	100.0
By seam	Upper Mercer (No. 3A)	10,776	9,483	1,293	12.0	<0.1
	Brookville (No. 4)	229,492	184,492	45,000	19.6	1.2
	Winters	159,689	118,689	41,000	25.7	0.8
	Clarion (No. 4A)	10,785,820	4,776,240	6,009,580	55.7	32.1
	Lower Kittanning (No. 5)	503,890	445,977	57,913	11.5	3.0
	Middle Kittanning (No. 6)	1,874,819	1,499,439	375,380	20.0	10.1
	Lower Freeport (No. 6A)	1,391,249	1,044,220	347,029	24.9	7.0
	Upper Freeport (No. 7)	60,140	48,691	11,449	19.0	0.3
	Mahoning (No. 7A)	177,048	123,934	53,114	30.0	0.8
	Pittsburgh (No. 8)	9,091,750	5,519,919	3,571,831	39.3	37.1
	Meigs Creek (No.9)	1,273,193	1,092,041	181,152	14.2	7.3
	TOTAL	25,557,866	14,863,125	10,694,741	41.8	100.0

[1]Total washed coal figures for 2001 reflect figures as reported by Ohio's coal preparation plants. These figures do not necessarily represent only 2001 production. In 2001, 25,790,543 tons of coal were produced, of which 14,339,541 tons (55.6%) were reported as washed by Ohio's mine operators. Coal not designated as washed or unwashed by Ohio's mine operators was assumed to be unwashed.
[2]The raw tonnage (before washing) and/or the clean tonnage (after washing) of coal was estimated for those mines which failed to report this information. These estimates were calculated using a statewide-average loss-in-washing percentage based on raw/washed coal values for type of mining and for seam deemed to be reliable.

TABLE 10.—*2001 Dollar value of coal at mine by county and mining method*

County[1]	Total				Underground				Surface			
	No. of mines	Tonnage sold (short tons)	Value at mine[2] (dollars)	Per ton average (dollars)	No. of mines	Tonnage sold (short tons)	Value at mine[2] (dollars)	Per ton average (dollars)	No. of mines	Tonnage sold (short tons)	Value at mine[2] (dollars)	Per ton average (dollars)
Athens	1	1,241,897	$21,733,192	$17.50	1	1,241,897	$21,733,192	$17.50				
Belmont	23[3]	7,622,867	150,430,782	19.73	2	5,086,475	98,984,755	19.46	23[3]	2,536,392	$51,446,027	$20.28
Carroll	3	114,263	2,811,631	24.61					3	114,263	2,811,631	24.61
Columbiana	6	215,778	4,297,899	19.92	1	1,900	40,000	21.05	5	213,878	4,257,899	19.91
Coshocton	2	63,816	1,340,000	21.00					2	63,816	1,340,000	21.00
Gallia	2	221,057	4,690,830	21.22					2	221,057	4,690,830	21.22
Guernsey	1	8,327	186,920	22.45					1	8,327	186,920	22.45
Harrison	10	3,058,424	72,680,713	23.76	1	1,723,078	47,731,591	27.70	9	1,335,346	24,949,122	18.68
Holmes	1	141,190	2,900,000	20.54					1	141,190	2,900,000	20.54
Jackson	4	1,305,575	27,984,183	21.43					4	1,305,575	27,984,183	21.43
Jefferson	10	912,273	20,519,532	22.49	3	569,290	13,264,778	23.30	7	342,983	7,254,754	21.15
Mahoning	3	16,875	366,980	21.75					3	16,875	366,980	21.75
Meigs	2	4,245,535	185,111,657	43.60	2	4,245,535	185,111,657	43.60				
Morgan	1	537,469	12,899,256	24.00					1[4]	537,469	12,899,256	24.00
Muskingum	3	701,248	15,818,839	22.56					3	701,248	15,818,839	22.56
Noble	6	578,262	9,818,361	16.98					6	578,262	9,818,361	16.98
Perry	1	1,052,138	19,287,602	18.33					1	1,052,138	19,287,602	18.33
Stark	8	696,906	13,283,588	19.06					8	696,906	13,283,588	19.06
Tuscarawas	19	784,425	14,342,935	18.28					19	784,425	14,342,935	18.28
Vinton	6[3]	1,628,756	34,883,679	21.42					6[3]	1,628,756	34,883,679	21.42
Washington	1	98,752	1,481,280	15.00					1	98,752	1,481,280	15.00
TOTAL	112	25,245,833	$616,869,859	$24.43	10	12,868,175	$366,865,973	$28.51	102	12,377,658	$250,003,886	$20.20

[1]Sales reported from mines operating in more than one county were evenly split between the counties involved unless a by-county breakdown was provided by the operator.
[2]The FOB value of coal sold was estimated for those mines which failed to report this information. These estimates were calculated using a countywide-average price per ton by mining method based on reported FOB values deemed to be reliable.
[3]Does not include mines extending into this county from adjoining counties.
[4]This mine extends into Morgan County from Noble County and is not included in the total number of mines.

TABLE 11.—*2001 Ohio coal-mine employment[1], by occupational group and month*

Occupational group	Number of employees												
	Total annual	January	February	March	April	May	June	July	August	September	October	November	December
All production workers	1,587	1,536	1,515	1,508	1,538	1,575	1,640	1,566	1,608	1,626	1,661	1,687	1,582
Underground mines	788	806	798	790	812	840	862	735	730	763	787	808	728
Surface mines	799	730	717	718	726	735	778	831	878	863	874	879	854
Supervisory, technical, and clerical	472	502	504	504	501	506	513	417	435	436	439	490	420
Central preparation plant, central shop, etc.	390	395	393	392	402	393	390	383	397	406	406	358	362
Reclamation	47	39	58	32	43	44	50	41	47	48	44	54	64
Other[2]	224	246	249	216	223	223	230	221	216	217	222	211	210
TOTAL	2,720	2,718	2,719	2,652	2,707	2,741	2,823	2,628	2,703	2,733	2,772	2,800	2,638

[1]Employment was estimated for mines not reporting employment.
[2]"Other" includes all employees who are not categorized in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.

TABLE 12.—*2001 Ohio coal-mine production employment[1], by county and month*

County[2]	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Athens	43	44	43	43	42	41	42	42	43	43	44	45	46
Belmont	430	323	337	351	393	402	429	441	456	485	508	516	512
Carroll	11	8	8	8	8	8	8	8	12	12	17	17	18
Columbiana	16	20	17	13	14	17	17	17	17	15	15	13	13
Coshocton	3	1	1	1	1	1	1	4	4	4	4	6	6
Gallia	13	12	11	12	12	17	17	18	17	10	11	13	19
Guernsey	1	0	0	0	0	0	0	1	2	2	2	2	4
Harrison	242	210	210	212	221	248	258	251	252	251	252	259	272
Holmes	10	11	11	11	11	11	12	12	9	9	9	8	8
Jackson	91	83	84	83	81	81	82	96	100	103	102	100	99
Jefferson	74	66	66	70	72	72	69	73	77	78	80	81	87
Mahoning	6	6	5	4	5	5	7	6	6	4	5	10	6
Meigs	276	379	374	372	359	357	355	213	199	199	199	199	100
Morgan	24	40	18	0	2	1	15	35	35	35	35	35	35
Muskingum	56	52	54	54	54	53	58	58	59	59	62	65	43
Noble	33	35	30	27	27	26	27	36	37	36	37	40	40
Perry	49	46	47	44	45	46	47	47	50	53	55	56	56
Stark	43	40	40	41	44	44	43	40	44	41	47	48	47
Tuscarawas	53	57	55	58	41	39	45	49	62	58	59	60	56
Vinton	106	96	97	96	100	100	102	112	119	121	111	107	108
Washington	7	7	7	8	6	6	6	7	8	8	7	7	7
TOTAL	1,587	1,536	1,515	1,508	1,538	1,575	1,640	1,566	1,608	1,626	1,661	1,687	1,582

[1]Employment was estimated for mines not reporting employment.
[2]For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 13.—*2001 Ohio coal-mine employment[1] in central preparation plants, central shops, etc., by county and month*

County[2]	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Athens	5	5	5	5	5	5	5	5	5	5	5	5	5
Belmont	70	70	70	69	72	68	72	74	70	72	69	68	70
Columbiana	11	11	11	11	11	11	11	11	11	11	11	11	11
Coshocton	26	25	25	26	26	26	26	28	25	25	25	25	25
Gallia	2	2	2	2	2	3	3	3	3	2	2	2	3
Harrison	37	37	39	38	40	37	32	32	30	39	40	40	42
Jackson	29	27	27	27	29	29	29	29	29	29	30	30	29
Jefferson	3	3	3	3	3	3	3	3	3	3	3	3	3
Mahoning	2	2	2	2	2	2	2	2	2	2	2	2	2
Meigs	102	108	108	108	109	109	109	92	115	115	116	67	67
Morgan	12	20	17	17	17	14	13	9	9	9	9	9	9
Noble	7	5	4	4	4	4	4	9	9	9	9	9	9
Perry	5	4	5	5	5	5	5	5	5	4	3	5	5
Scioto	28	28	28	28	28	28	28	28	28	28	28	28	28
Tuscarawas	13	12	12	12	11	11	11	14	14	14	16	16	16
Vinton	38	36	35	35	38	38	37	39	39	39	38	38	38
TOTAL	390	395	393	392	402	393	390	383	397	406	406	358	362

[1]Employment was estimated for mines not reporting employment.
[2]For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 14.—*2001 Ohio coal-mine employment[1] in supervisory, technical, and clerical positions, by county and month*

County[2]	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Athens	10	10	10	10	10	10	10	10	10	10	10	10	10
Belmont	165	136	140	144	148	150	155	163	172	175	179	232	192
Carroll	5	5	5	5	5	5	5	5	6	6	6	6	6
Columbiana	8	8	8	8	7	8	8	8	8	8	8	8	8
Coshocton	16	16	16	16	16	16	16	16	16	16	16	16	16
Guernsey	1	0	0	0	0	0	0	1	1	1	1	1	1
Harrison	32	27	27	27	26	28	36	35	35	34	33	36	37
Holmes	1	1	1	1	1	1	1	1	1	1	1	1	1
Jackson	27	26	26	26	26	27	27	27	27	27	28	27	27
Jefferson	8	8	8	9	9	9	9	9	8	8	8	8	8
Mahoning	2	1	1	1	1	1	2	2	2	2	2	2	2
Meigs	113	172	170	166	164	163	157	64	68	68	68	68	37
Morgan	19	24	24	24	24	24	24	15	15	15	15	15	15
Muskingum	2	2	2	2	2	2	2	2	2	2	2	1	1
Noble	9	11	11	11	11	11	10	7	7	6	6	6	6
Perry	3	3	3	3	3	3	3	3	3	3	3	3	3
Scioto	8	8	8	7	7	7	7	8	8	8	8	8	8
Stark	8	7	7	7	8	8	8	8	8	8	9	9	9
Tuscarawas	10	11	11	11	8	8	8	8	13	13	11	8	8
Vinton	24	25	25	25	24	24	24	24	24	24	24	24	24
Washington	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	472	502	504	504	501	506	513	417	435	436	439	490	420

[1]Employment was estimated for mines not reporting employment.
[2]For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 15.—*2001 Ohio surface coal-mine reclamation employment[1], by county and month*

County[2]	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Belmont	20	17	15	17	18	17	19	19	17	19	20	31	39
Columbiana	3	2	2	2	3	3	3	3	3	3	3	3	3
Guernsey	1	2	2	1	1	1	1	0	0	0	0	0	0
Harrison	2	0	0	0	0	1	5	4	5	4	3	2	1
Jackson	2	3	3	3	3	3	3	1	1	1	1	1	1
Jefferson	1	0	0	0	0	0	1	1	1	1	1	1	3
Morgan	9	7	25	3	9	7	7	3	9	9	9	9	9
Muskingum	1	0	0	0	0	3	3	3	3	3	0	0	0
Noble	2	2	6	1	2	2	2	1	2	2	2	2	2
Stark	2	2	2	2	2	2	2	2	2	2	2	2	2
Tuscarawas	2	2	1	1	2	2	1	2	2	2	1	1	2
Vinton	2	2	2	2	3	3	3	2	2	2	2	2	2
TOTAL	47	39	58	32	43	44	50	41	47	48	44	54	64

[1]Employment was estimated for mines not reporting employment.
[2]For those operattions reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 16.—*2001 Ohio coal-mine employment[1] in other positions[2], by county and month*

County[3]	Number of employees												
	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
Athens	8	8	8	8	8	8	8	8	8	8	8	8	8
Belmont	76	74	77	71	76	75	79	81	74	74	80	78	79
Columbiana	3	3	3	3	3	3	3	3	3	3	3	3	3
Harrison	28	29	29	28	27	26	26	27	29	30	30	32	30
Jackson	20	19	19	19	20	20	20	21	21	21	19	19	19
Jefferson	4	4	4	4	4	4	4	4	4	4	4	4	4
Meigs	38	59	59	58	57	58	57	21	21	21	21	10	10
Morgan	22	25	25	6	7	8	10	30	30	30	30	30	30
Noble	6	8	8	2	2	2	4	8	8	8	8	8	8
Scioto	6	6	6	6	6	6	6	6	6	6	6	6	6
Stark	4	4	4	4	3	3	3	3	3	3	4	4	4
Vinton	9	7	7	7	10	10	10	9	9	9	9	9	9
TOTAL	224	246	249	216	223	223	230	221	216	217	222	211	210

[1]Employment was estimated for mines not reporting employment.
[2]"Other positions" includes all employees who do not belong in any other employment category, such as mobile equipment operators, mechanics, or general outside workers.
[3]For those operattions reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties involved unless a by-county breakdown was provided by the operator.

TABLE 17.—*2001 Wage and salary payments to Ohio coal-mine employees, by county and occupational group*

County[1]	Wage and salary payments (nearest whole dollar)[2]						
	All occupations	Underground production employees	Surface production employees	Central preparation plant, central shop, etc.	Supervisory, technical, and clerical	Reclamation	Other
Athens	$3,801,578	$2,380,975		$290,556	$865,793		$264,254
Belmont	40,834,311	13,230,967	$6,242,779	3,425,358	8,860,463	$973,914	8,100,830
Carroll	534,468		418,277		116,191		
Columbiana	1,762,494	25,000	713,580	475,947	336,739	91,228	120,000
Coshocton	2,365,333		192,987	1,090,983	1,081,363		
Gallia	687,018		574,634	112,384			
Guernsey	80,077		44,118		25,108	10,851	
Harrison	16,979,319	7,624,606	4,326,402	2,333,396	1,254,754	44,039	1,396,122
Holmes	353,961		310,000		43,961		
Jackson	8,075,029		4,522,740	1,331,994	1,513,059	50,000	657,236
Jefferson	4,030,889	2,184,269	1,066,123	125,073	497,011	23,391	135,022
Mahoning	324,976		215,374	77,128	32,474		
Meigs	30,373,086	13,872,812		4,607,800	9,845,744		2,046,730
Morgan	8,400,000		1,900,000	650,000	2,800,000	550,000	2,500,000
Muskingum	2,771,844		2,658,141		85,000	28,703	
Noble	3,280,146		1,740,000	560,000	515,146	115,000	350,000
Perry	2,693,141		2,300,000	200,000	193,141		
Scioto	1,986,605			982,240	453,676		550,689
Stark	2,430,735		1,876,912		395,910	33,087	124,826
Tuscarawas	2,548,596		1,789,580	497,265	259,328	2,423	
Vinton	7,729,427		4,125,074	1,720,307	1,513,060	50,000	320,986
Washington	437,580		390,000		47,580		
TOTAL	$142,480,613	$39,318,629	$35,406,721	$18,480,431	$30,735,501	$1,972,636	$16,566,695

[1]For those operations reporting activity in more than one county, wage and salary payments were evenly split between the counties involved unless a by-county breakdown was provided by the operator.

[2]For those operations reporting only a total wage and salary payment to all workers, an equal pay rate was assumed for all employees. In cases where quarterly employment was reported but wage and salary payments were not, wage and salary payments for that quarter were estimated from reported payments in the other quarters to arrive at the annual figure. For mines reporting employment and no wage and salary payments, wage and salary payments were estimated using a countywide or statewide average.

Plant Manager David Conrad (right) and Underground Foreman Tim Miller (left) discuss the underground feeder-crusher unit at the East Fairfield Coal Co. underground limestone mine in Mahoning County.

INDUSTRIAL MINERALS

Industrial minerals, other than mineral fuels, were produced in a total of 86 Ohio counties in 2001. The combined value of all nonfuel industrial minerals sold in 2001 was $802,217,295.

In 2001, 442 companies operated 731 industrial-mineral mining operations. Industrial minerals were produced or sold by 307 companies from 495 active operations. Thirty-three of the 307 companies produced more than one industrial mineral from 39 operations, including 7 companies that produced coal and more than one industrial mineral from 9 operations. The remaining 274 companies produced one industrial-mineral commodity.

Of the 39 multiple industrial-mineral operations (including those operations producing coal and more than one industrial-mineral commodity), 9 operations produced sand and gravel and clay; 5 operations produced clay and shale; 7 operations produced limestone and sand and gravel, 5 operations produced limestone and clay; 4 operations produced limestone, clay, and shale; 3 operations produced sandstone and sand and gravel; 1 operation produced sandstone and clay; 1 operation produced limestone, sand and gravel, and clay; 1 operation produced limestone, sandstone, and shale; 1 operation produced sand and gravel and shale; and 1 operation produced sand and gravel, sandstone, and shale.

The 250 multiple industrial-mineral-commodity production employees worked an average of 191 days in 2001. Total wages of $11,421,820 were paid to a total of 395 employees (250 production employees and 145 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $28,916.

The total average annual employment reported in 2001 for industrial mineral operations was 5,504 people (3,883 production employees and 1,621 nonproduction employees). Total wages for all employees at industrial mineral operations in 2001 were $217,962,904. The average annual wage, based on those employees for whom wages were reported, was $39,608.

TABLE 18.—*2001 Value of Ohio industrial minerals*

Commodity	Sales (tons)	Change from 2000 (tons/percent)	Value[1] (dollars)	Percent of total value
Limestone and dolomite	80,998,236	+1,057,564/+1.3	$395,585,481	49.2
Sand and gravel	56,829,272	+1,094,783/+2.0	$263,845,940	32.9
Salt	4,261,545	-823,278/-16.2	$89,840,924	11.2
Sandstone and conglomerate	1,768,701	-810,741/-31.4	$38,460,128	4.8
Clay	1,730,151	-344,501/-16.6	$7,648,956	1.0
Shale	1,528,067	-1,007,158/-39.7	$5,366,308	0.7
Gypsum	117,003	-113,134/-49.2	$1,469,558	0.2
Peat	0	-2,004/-100.0	$0	0.0
TOTAL	147,232,975	-948,469/-0.6	$802,217,295	100.0

[1]The FOB value of industrial minerals sold was estimated for those mines which failed to report this information and for those producing material for captive use. These estimates were calculated using a countywide- or statewide-average price per ton based on reported FOB values.

Bob McIntyre and Harold Oesch wire up a shot at the East Fairfield Coal Co. underground limestone mine in Mahoning County. Six to eight faces are shot per day.

TABLE 19.—*2001 Employment at Ohio industrial mineral operations, by county and commodity*

County[1]	Number of employees[2]																			
	Total employees[3]	Total[3]		Limestone and dolomite		Sand and gravel[4]		Sandstone and conglomerate		Clay		Shale		Salt		Gypsum		Peat		Multiple commodities	
		Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production	Production	Non-production
Adams	52	45	7	45	7																
Allen	48	36	12	33	11	3	1														
Ashland	42	35	7			35	7													5	4
Ashtabula	33	23	10			18	6			1	0									3	1
Athens	37	21	16	12	8	5	7														
Auglaize	38	28	10	21	7	6	3			1	0										
Belmont	39	31	8	17	3	2	2													12	3
Brown	25	23	2	20	2															3	0
Butler	126	90	36			90	36														
Carroll	7	4	3			4	3														
Champaign	22	17	5			17	5														
Clark	61	48	13			44	13													4	0
Clermont	17	10	7			10	7														
Clinton	53	31	22	31	22																
Columbiana	54	33	21			16	12			1	0	2	0							14	9
Coshocton	88	49	39			39	34	10	5												
Crawford	37	37	0	37	0																
Cuyahoga	262	159	103									3	24	156	79						
Darke	14	10	4	6	2	4	2														
Delaware	80	71	9	71	9																
Erie	168	131	37	115	35	1	1	10	1											5	0
Fairfield	19	9	10			7	5													2	5
Fayette	5	4	1	4	1																
Franklin	376	300	76	194	46	106	30														
Fulton	6	5	1			5	1														
Gallia	14	6	8			6	8														
Geauga	93	32	61			18	2	14	59												
Greene	142	98	44	41	20	49	23													8	1
Guernsey	10	5	5	5	5																
Hamilton	194	101	93			92	92													9	1
Hancock	32	30	2	30	2																
Hardin	12	10	2	10	2																
Harrison	4	4	0	2	0							2	0								
Highland	75	47	28	47	28																
Hocking	26	13	13	6	5	7	8														
Holmes	32	20	12			17	12													3	0
Huron	1	1	0					1	0												
Jackson	22	16	6	15	4					1	2										
Jefferson	5	4	1	4	1																
Knox	68	46	22			18	18	28	4												

Lake	212	120	92			10	10	2	2					108	80							
Lawrence	5	2	3			2	3															
Licking	40	29	11			22	9			2	1	3	0	2	1							
Logan	75	45	30	34	23	9	6			2	1											
Lorain	9	9	0					9	0													
Lucas	91	75	16	56	14	3	0													19	2	
Madison	6	4	2																	4	2	
Mahoning	73	62	11	7	6			1	0											54	5	
Marion	58	48	10	41	7	4	2					3	1									
Medina	40	32	8			32	8															
Meigs	47	41	6			41	6															
Mercer	17	10	7	8	5					2	2											
Miami	83	63	20	50	16	13	4															
Monroe	8	6	2	6	2																	
Montgomery	86	55	31	24	13	31	18															
Morgan	19	15	4	6	1	9	3															
Morrow	9	7	2			7	2															
Muskingum	123	95	29	79	24	13	5			3	0											
Noble	8	6	2	6	2																	
Ottawa	139	103	36	98	29					2	6					3	1					
Paulding	104	39	65	28	11															11	54	
Perry	100	83	17	15	7			44	7	2	1									12	2	
Pickaway	33	28	5	7	2	21	3															
Pike	49	26	23	6	4	12	4	7	13											1	2	
Portage	199	130	69			129	69													1	0	
Preble	55	43	12	19	5	23	7													1	0	
Putnam	17	10	7	9	5					1	2											
Richland	34	26	8			24	8			1	0	1	0									
Ross	39	22	17	8	2	13	12	0	3											1	0	
Sandusky	330	255	75	255	75																	
Scioto	29	20	9			13	6	7	3													
Seneca	92	68	24	68	24																	
Shelby	53	34	19	12	9	13	3													9	7	
Stark	120	86	34			67	26			3	0									16	8	
Summit	18	10	8			8	6							2	2							
Trumbull	15	4	11					2	1											2	10	
Tuscarawas	129	87	42			39	12	3	2	3	1	10	5							32	22	
Union	41	32	9	32	9																	
Van Wert	27	19	8	19	8																	
Vinton	7	7	0	7	0																	
Warren	39	32	7			32	7															
Washington	50	34	16			33	15	1	1													
Wayne	50	38	12			18	3					1	0	2	2					17	7	
Williams	33	21	12			19	12													2	0	
Wood	65	53	12	53	12																	
Wyandot	188	166	22	148	20	17	2															
TOTAL	5,504	3,883	1,621	1,867	555	1,296	609	139	101	25	16	25	30	270	164	3	1	0	0	250	145	

[1]For those operations reporting activity in more than one county, employment was evenly split (to the nearest whole employee) between the counties unless a by-county breakdown was provided by the operator.
[2]Employment is not included for mines which were owner operated.
[3]Any tally inconsistencies are due to computer rounding.
[4]Employment for Lake Erie sand and gravel dredging operations is included in the total employment figure for the county in which the operation is based.

LIMESTONE AND DOLOMITE

Limestone and dolomite were sold or produced by 65 companies at 121 operations in 49 Ohio counties during 2001. Sales of limestone and dolomite totaled 80,998,236 tons (+1.3 percent from 2000); Erie, Ottawa, Delaware, Franklin, and Seneca Counties accounted for 39.1 percent of those sales. Reported known production totaled 81,944,288 tons.

Lime produced from Ohio limestone and dolomite totaled 1,360,157 tons in 2001 and came from five operations in Ottawa, Sandusky, Seneca, and Wyandot Counties. Ohio ranks 3rd nationally in the production of lime out of 32 producing states. The top five states, in descending order of lime production, are Missouri, Alabama, Ohio, Kentucky, and Texas. Ohio ranks 5th in the production of crushed stone (which includes crushed sandstone) out of 49 producing states. The top five states in the production of crushed stone, in descending order, are Texas, Pennsylvania, Florida, Missouri, and Ohio.[4]

The total value[5] of limestone and dolomite sold in 2001 was $395,585,481. Average price per ton was $4.88.

An annual average of 1,867 employees worked an average of 219 days to produce limestone and dolomite. Total wages of $101,971,722 were paid to a total of 2,422 employees (1,867 production employees and 555 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $42,102. An additional 149 people (113 production employees and 36 nonproduction employees) were employed by operations mining limestone and dolomite along with one or more other mineral commodities.

The primary use for crushed and broken limestone and dolomite was road construction/resurfacing. Other major uses for various forms of limestone and dolomite included stone for portland cement concrete and asphaltic concrete, commercial building, and the production of lime.

[4]Information from U.S. Geological Survey.
[5]Includes reported and estimated values. See footnote 1, p. 9.

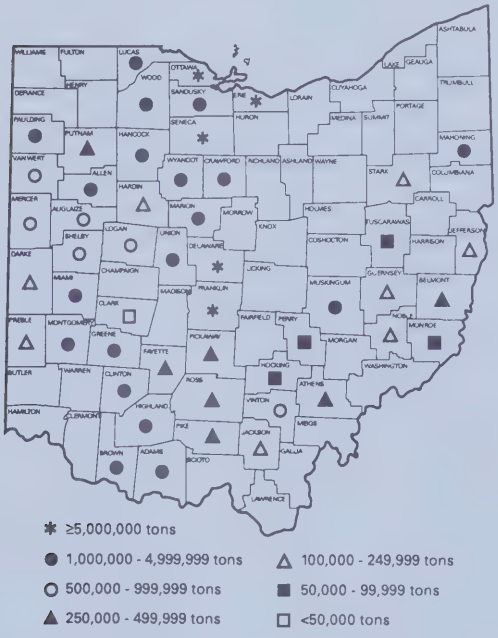


FIGURE 6.—Sales of limestone and dolomite in Ohio in 2001, by county.

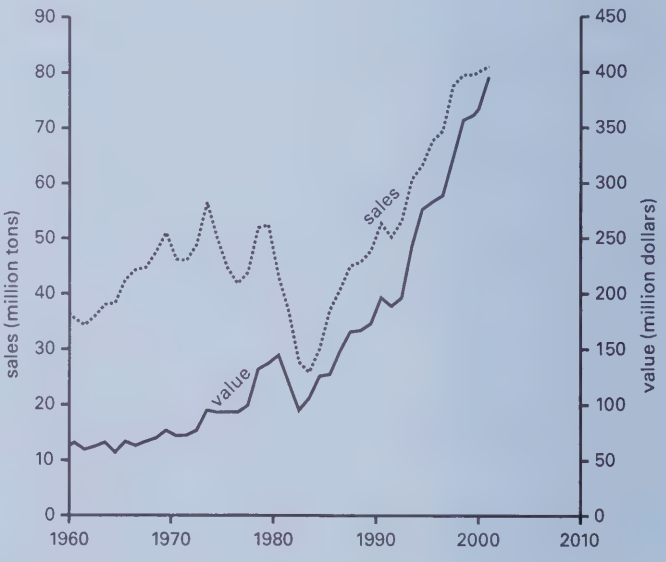


FIGURE 7.—Sales and value of limestone and dolomite in Ohio. Value line dashed where data not available.

TABLE 20.—*2001 Production of lime from Ohio stone, by county and type*

County	Total tons[1]	Building (tons)	Chemical and industrial (tons)	Refractory (tons)	Other (tons)
Ottawa	144,626		102,426	42,200	
Sandusky	832,071		782,055	50,016	
Seneca	310,460		310,460		
Wyandot	73,000		73,000		
TOTAL	1,360,157		1,267,941	92,216	

[1]Burning produced a 55.5 percent weight loss.

TABLE 21.—*2001 Ohio limestone and dolomite sales, by county and type*

County	Tons sold															
	Total all types	Crushed and broken stone										Dimension stone	Stone for portland cement manufacture	Agricultural stone (aglime)	Raw stone for burning	Unspecified/ other
		Total	Riprap	Flux stone	Stone for portland cement concrete	Stone for asphaltic concrete	Road construction/ resurfacing	Commercial building	Railroad ballast	Extenders/ fillers	Unspecified/ other					
Adams	1,864,897	1,864,897									1,864,897					
Allen	1,190,773	1,184,979	2,229		233,711	339,040	90,546	43,971	13,000	1,650	460,832	2,900		2,894		
Athens	279,244	279,244									279,244					
Auglaize	763,185	761,185	10,835		158,000	103,346	218,004				271,000			2,000		
Belmont	450,116	450,116	10,421				439,695									
Brown	1,284,471	1,284,471									1,284,471					
Clark	20,823	20,823					20,823									
Clinton	1,817,706	1,800,343	61,074		300,000	375,000	250,000	650,000			164,269	151		17,212		
Crawford	2,724,000	2,633,000	21,000	183,000	704,000	545,000				227,000	953,000			91,000		
Darke	190,000	190,000				190,000										
Delaware	6,331,624	6,326,624	27,260		1,210,000	520,923	921,632	126,762			3,520,047			5,000		
Erie	8,579,568	8,579,568	23,254		700,899	1,120,269	5,243,401	230,000	19,818		1,241,927					
Franklin	5,173,877	5,173,877	36,879		452,002	501,924	2,320,869	1,354,360			507,843					
Greene	2,073,397	1,447,164				140,425	10,820	120,919			1,175,000		626,233			
Guernsey	152,088	152,088					76,044	76,044								
Hancock	1,401,000	1,401,000	1,000		153,000	211,000				243,000	793,000					
Hardin	239,956	231,919	2,987		27,043		32,214	169,675						8,037		
Highland	2,064,838	2,052,042	2,934			65,097	401,663				1,582,348			12,796		
Hocking	82,786	82,786					82,786									
Jackson	209,577	209,577									209,577					
Jefferson	112,617	112,617	14,640				79,984	11,262	1,100		5,631					
Logan	932,696	932,696	26,240		244,954	150,856	219,475	206,295			84,876					
Lucas	3,151,834	3,151,834	5,870			117,698	338,127	152,938			2,537,201					
Mahoning	2,233,355	1,668,081					662,177				1,005,904		565,274			
Marion	1,172,606	1,169,100	12,624		358,809	196,984	22,287				578,396			3,506		
Mercer	605,358	605,358									605,358					
Miami	1,557,805	1,492,899	7,209	20,515	201,541	63,256	806,322	295,255		98,801				64,906		
Monroe	65,174	65,174	65,174													
Montgomery	1,573,435	1,195,250	4,019			100,000	600,000	491,231				77,612	300,573			
Muskingum	2,118,597	1,998,999	119,599		119,599	119,598	1,075,747	195,642	119,598		249,216			119,598		
Noble	206,177	206,177	82,956				123,221									
Ottawa	6,596,975	6,260,874	32,196		771,687	578,907	3,131,453	928,023	276,777	269,777	272,054			19,370	316,731	
Paulding	1,775,302	1,018,187									1,018,187		757,115			
Perry	82,786	82,786					82,786									
Pickaway	405,036	405,036	1,300		75,000	80,000	60,000	133,736	5,000		50,000					

TABLE 21.—*2001 Ohio limestone and dolomite sales, by county and type* (cont.)

County	Tons sold															
	Total all types	Crushed and broken stone										Dimension stone	Stone for portland cement manufacture	Agricultural stone (aglime)	Raw stone for burning	Unspecified/ other
		Total	Riprap	Flux stone	Stone for portland cement concrete	Stone for asphaltic concrete	Road construction/ resurfacing	Commercial building	Railroad ballast	Extenders/ fillers	Unspecified/ other					
Pike	284,125	279,881	12,606				267,275							4,244		
Preble	111,296	104,795	13,660				91,135					6,501				
Putnam	459,712	459,712	232		92,924	22,000	205,556				139,000					
Ross	438,545	438,545			40,000		80,000	266,545	2,000		50,000					
Sandusky	3,209,191	1,108,403			50,000		820,140	80,000			158,263			51,361	2,049,427	
Seneca	5,048,365	4,500,896	1,687				1,326,931				3,172,278	2,802			544,667	
Shelby	889,909	889,909	11,944				869,820	8,145								
Stark	207,237	207,237	15,426				191,811									
Tuscarawas	81,588	81,588	42,539			1,189	37,860									
Union	2,500,975	2,500,975			375,147	750,292	875,341	325,127			175,068					
Van Wert	676,734	676,734			29,200	50,000	100,000	31,750			465,784					
Vinton	531,287	531,287									531,287					
Wood	2,304,340	2,249,485	6,860		71,970	203,755	257,823	42,000			1,667,077	54,000		855		
Wyandot	4,771,253	4,478,368	14,482	51,000	1,054,795	794,937	463,814	419,128	23,634	190,000	1,466,578			146,885	146,000	
TOTAL	80,998,236	74,998,586	691,136	254,515	7,424,281	7,341,496	22,897,582	6,358,808	460,927	1,030,228	28,539,613	143,966	2,249,195	549,664	3,056,825	

SAND AND GRAVEL

Sand and gravel were sold or produced by 218 companies at 302 operations in 64 Ohio counties plus Lake Erie during 2001. Sales[6] of sand and gravel totaled 56,829,272 tons (+2.0 percent from 2000). Sand accounted for 31,342,674 tons of the total sand and gravel sold, and gravel accounted for 25,486,498 tons. Butler, Franklin, Hamilton, Stark, and Portage Counties led in sales, accounting for 46.1 percent of the total. Reported known production[6] of sand and gravel totaled 56,848,867 tons in 2001. Ohio ranks 4th nationally in the production of construction sand and gravel out of 50 producing states and Puerto Rico. The top five states, in descending order of production, are California, Texas, Michigan, Ohio, and Arizona. Ohio ranks 9th nationally in the production of industrial sand and gravel out of 37 states. The states leading Ohio in the production of industrial sand and gravel, in descending order, are Illinois, Michigan, Wisconsin, California, Texas, New Jersey, North Carolina, and Oklahoma. Ohio ranks 3rd nationally in the production of aggregates, including crushed stone. The top five states, in descending order of aggregate production, are California, Texas, Ohio, Michigan, and Pennsylvania.[7]

A total of 178,012 tons of sand were dredged from Lake Erie in 2001. The Maumee Bay and Maumee River areas are no longer producing sand or gravel.

The total value[8] of sand and gravel sold in 2001 was $263,845,940. Average price per ton was $4.64.

An annual average of 1,296 employees worked an average of 184 days in 2001 to produce sand and gravel. Total wages of $75,837,098 were paid to a total of 1,905 employees (1,296 production employees and 609 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $39,810. An additional 82 people (61 production employees and 21 nonproduction employees) were employed by operations mining sand and gravel along with one or more other mineral commodities.

Building, asphaltic concrete, portland cement concrete, and road construction/resurfacing were the major uses for Ohio sand and gravel in 2001.

[6]Please note—Sales and production figures for sand include material dredged from Lake Erie.
[7]Information from U.S. Geological Survey.
[8]Includes reported and estimated values. See footnote 1, p. 9.

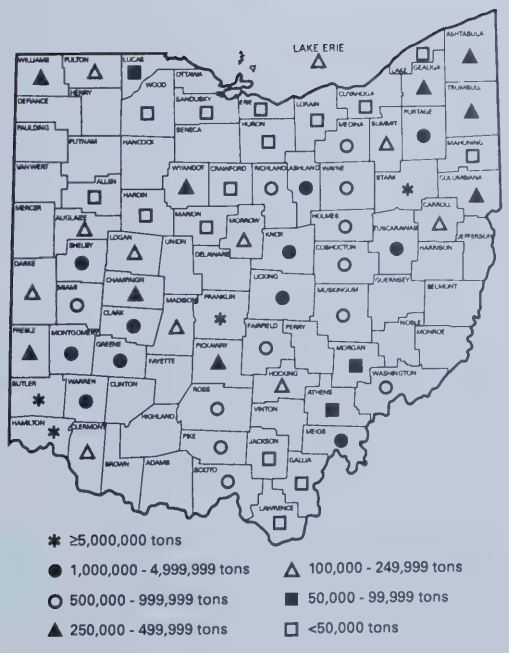


FIGURE 8.—Sales of sand and gravel in Ohio in 2001, by county.

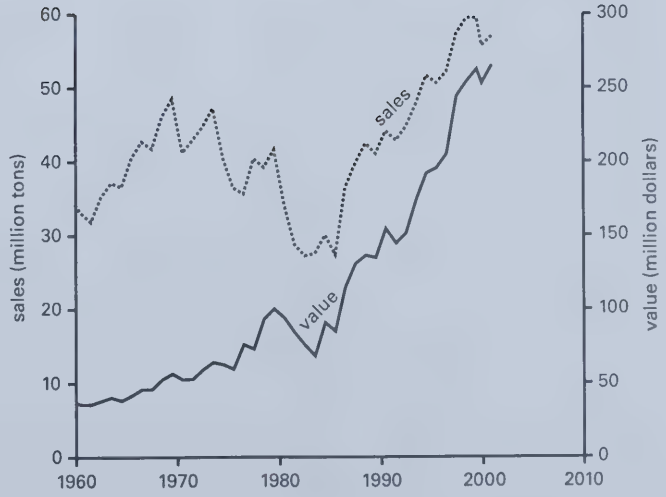


FIGURE 9.—Sales and value of sand and gravel in Ohio. Value line dashed where data not available. Figures from 1984 to 2001 include Lake Erie dredged material.

TABLE 22.—*2001 Ohio sand and gravel sales, by county and type*

County	Tons sold															
	Total sand and gravel	Total sand	Total gravel	Building		Portland cement concrete		Asphaltic concrete		Road construction/ resurfacing		Filtration		Foundry sand	Industrial sand	Other/unspecified	
				Sand	Gravel	Sand	Gravel	Sand	Gravel	Sand	Gravel	Sand	Gravel			Sand	Gravel
Allen	33,482	29,718	3,764		2,740	20,422		6,386		2,065						845	1,024
Ashland	1,755,015	561,842	1,193,173	231,477	424,364				3,266	283,379	651,475					46,986	114,068
Ashtabula	405,683	244,149	161,534	133,010	121,127	90,000		6,689				9,925	29,576			4,525	10,831
Athens	51,530	38,062	13,468		10,339	12,685										25,377	3,129
Auglaize	242,805	199,244	43,561	1,474	3,026	181,511	5,592					7,299	5,981			8,960	28,962
Butler	6,015,341	3,427,974	2,587,367	428,460	692,322	80,366	55,364	78,903	34,371		199,679					2,840,245	1,605,631
Carroll	105,870	76,151	29,719							76,151	29,719						
Champaign	409,065	126,888	282,177	2,200	24,276											124,688	257,901
Clark	1,954,553	973,891	980,662	58,632	58,239	122,422	146,664	31,091	116,118	11,548	14,664	13,645	3,640			736,553	641,337
Clermont	139,158	71,148	68,010													71,148	68,010
Columbiana	284,810	131,969	152,841	38,191	62,321					46,728	35,649	4,880	8,016			42,170	46,855
Coshocton	501,182	181,190	319,992	17,313	28,336	39,485	63,552	47,159	73,418	69,420	140,509	1,397	2,890			6,416	11,287
Crawford	648	648		648													
Cuyahoga	22,000	22,000														22,000	
Darke	101,925	61,000	40,925													61,000	40,925
Erie	1,873	1,008	865								865					1,008	
Fairfield	922,907	643,866	279,041	95,371	41,873	190,742	81,746	222,532	95,371	82,655	35,423	12,716	4,450			39,850	20,178
Franklin	5,528,746	2,492,244	3,036,502	186,678	1,125,106	1,200,391	100,000	876,305	801,605		18,805					228,870	990,986
Fulton	183,652	183,652		170,384												13,268	
Gallia	8,494	4,789	3,705										3,705			4,789	
Geauga	351,093	271,014	80,079	17,662	7,233	171,471		221			3,466	2,140	40,205			79,520	29,175
Greene	2,705,023	1,514,504	1,190,519	3,386	134,376	127,847	154,925		75,203		147,726					1,383,271	678,289
Hamilton	5,086,136	3,169,242	1,916,894	963,058	951,727	151,581	46,062	151,579			35,037	127	798			1,902,897	883,270
Hardin	100		100														100
Hocking	239,416	139,016	100,400		8	40,000	15,000	46,786	54,887	13,252	11,046					38,978	19,459
Holmes	648,048	371,595	276,453	8,238	104,121	243,911	53,662	36,920	29,701	34,963	52,662	34,254	19,192			13,309	17,115
Huron	56	56		56													
Jackson	7,494		7,494														7,494
Knox	1,066,400	506,260	560,140	110,603	141,145	179,780	75,000	185,218	163,500		27,569					30,659	152,926
Lake	6,471	5,000	1,471													5,000	1,471
Lake Erie	178,012	178,012		62,812		22,069		76,393				8,488				8,250	
Lawrence	3,683	3,683		2,459												1,224	
Licking	1,431,505	808,810	622,695	659,877	603,205	42,428		105,645	18,200							860	1,290
Logan	170,796	94,116	76,680	1,902	3,025	6,006		6,851								79,357	73,655
Lorain	9,100	9,100		9,100													
Lucas	53,569	53,569		911												52,658	
Madison	187,229	51,285	135,944													51,285	135,944
Mahoning	1,380	1,380														1,380	
Marion	36,369	30,164	6,205			22,791										7,373	6,205
Medina	838,613	557,431	281,182	124,714	107,192	380,085		16,000			155,303	204	18,687			36,428	

Meigs	1,565,375	996,917	568,458	58,940	39,845	110,104	73,760	280,703	200,611	90,765	76,352	27,340	19,933			429,065	157,957
Miami	666,382	389,400	276,982													389,400	276,982
Montgomery	1,491,080	524,511	966,569	13,658	44,599	166,216	258,400	85,882	90,997	482	60,390		20,865			258,273	491,318
Morgan	73,227	40,854	32,373	700	1,500	1,816	3,000	800	400		6,000		5,700			37,538	15,773
Morrow	245,438	76,095	169,343	69,862	99,798						59,427	6,233	6,894				3,224
Muskingum	695,810	382,705	313,105	54,695	40,649	70,362	76,225	105,257	108,096	30,490	33,812	4,691	10,081			117,210	44,242
Pickaway	420,347	210,342	210,005	12,186	50,742	100,000		50,340	62,000	90	26,500		137			47,726	70,626
Pike	559,515	432,191	127,324	338	997	14,541				16,884	25,020	40,039	11,085			360,389	90,222
Portage	4,499,652	3,142,842	1,356,810	958,423	567,483	602,739	2,360	581,439	388,611	104,793	68,840	2,000	43,225			893,448	286,291
Preble	392,248	108,543	283,705	77,177	262,431						24					31,366	21,250
Richland	871,823	295,281	576,542	57,498	226,459			140,841	58,294	116	247,041		1,146			96,826	43,602
Ross	564,140	309,705	254,435	58,362	48,746	54,710	32,009	94,799	86,234	15,073	33,743	2,312	23,664			84,449	30,039
Sandusky	43,800	43,000	800			43,000					800						
Scioto	666,860	528,035	138,825	16,516	50,046	37,904	6,781			233,252	39,581					240,363	42,417
Shelby	1,133,036	567,833	565,203	100,000	152,655					251,233	95,148	5,000				211,600	317,400
Stark	5,041,761	2,789,581	2,252,180	14,677	135,816	350,767	182,732	510,608	716,061	957,081	776,485					956,448	441,086
Summit	116,980	87,333	29,647	9,995				42,012	16,560	12						35,314	13,087
Trumbull	274,945	251,265	23,680	98,347	23,680	100,447		33,441								19,030	
Tuscarawas	2,099,936	1,077,352	1,022,584	350,640	322,721	147,553	137,415	181,237	143,921	338,903	275,622	11,303	45,212		23,241	24,475	97,693
Warren	1,453,148	462,861	990,287	21,753	70,188											441,108	920,099
Washington	826,720	487,092	339,628	2,131					12,864	14,454	28,782	527				469,980	297,982
Wayne	555,723	206,787	348,936	76,773	296,385	54,800	16,129	45,909	5,352					12,405		17,000	31,070
Williams	448,013	354,209	93,804	15,372	31,045	251,782										87,055	62,759
Wood	33,260	31,700	1,560			31,700	1,560										
Wyandot	400,721	310,570	90,151	66,517	45,606	205,330		29,000				7,462	27,545			2,261	17,000
TOTAL	56,829,272	31,342,674	25,486,498	5,463,176	7,157,492	5,669,764	1,587,938	4,076,946	3,355,641	2,673,789	3,413,164	201,982	352,627	12,405	23,241	13,221,471	9,619,636

TABLE 23.—*2001 Ohio Lake Erie sand and gravel production*

Area	Production[1]	
	Cubic yards	Short tons
Lake Erie		
Fairport	125,750	169,762
Vermilion-Lorain "A"	6,111	8,250
Vermilion-Lorain "B"	0	0
TOTAL	131,861	178,012

[1]Production reported in cubic yards; converted to tons in the ratio of 1 cubic yard equals 1.35 short tons.

SANDSTONE AND CONGLOMERATE

Sandstone and conglomerate were sold or produced by 21 companies at 30 operations in 17 Ohio counties during 2001. Sales totaled 1,768,701 tons (-31.4 percent from 2000). Geauga, Perry, Trumbull, Knox, and Pike Counties accounted for 83.6 percent of the total sales. Crushed sandstone and conglomerate accounted for 1,718,504 tons of the total sales, and dimension stone accounted for 50,197 tons. Reported known production of sandstone and conglomerate was 1,940,869 tons in 2001. Ohio ranks 12th nationally in production of all dimension stone out of 33 producing states. Ohio ranks 3rd in the production of sandstone dimension stone. The top five states, in descending order of total dimension-stone production, are Indiana, Vermont, Minnesota, South Dakota and North Carolina.[9] National standings for crushed stone are included with Limestone and Dolomite.

The total value[10] of sandstone and conglomerate sold in 2001 was $38,460,128. Average price per ton was $20.05 for crushed stone and $79.63 for dimension stone.

An annual average of 139 employees worked an average of 148 days in 2001 to produce sandstone and conglomerate. Total wages of $8,035,440 were paid to a total of 240 employees (139 production employees and 101 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $33,481. An additional 15 people (10 production employees and 5 nonproduction employees) were employed by operations mining sandstone and conglomerate along with one or more other mineral commodities.

Crushed stone was used primarily for glass sand, construction, aggregate, foundry sand, and silica flour. Dimension stone was used primarily for rough construction purposes.

[9]Information from U.S. Geological Survey.
[10]Includes reported and estimated values. See footnote 1, p. 9.

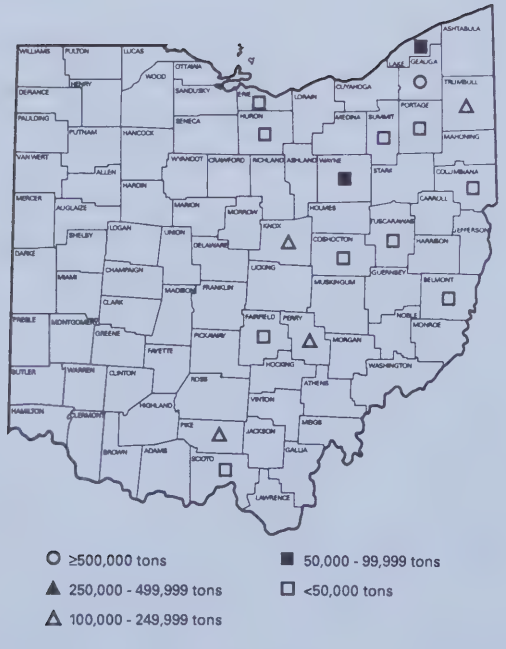


FIGURE 10.—Sales of sandstone and conglomerate in Ohio in 2001, by county.

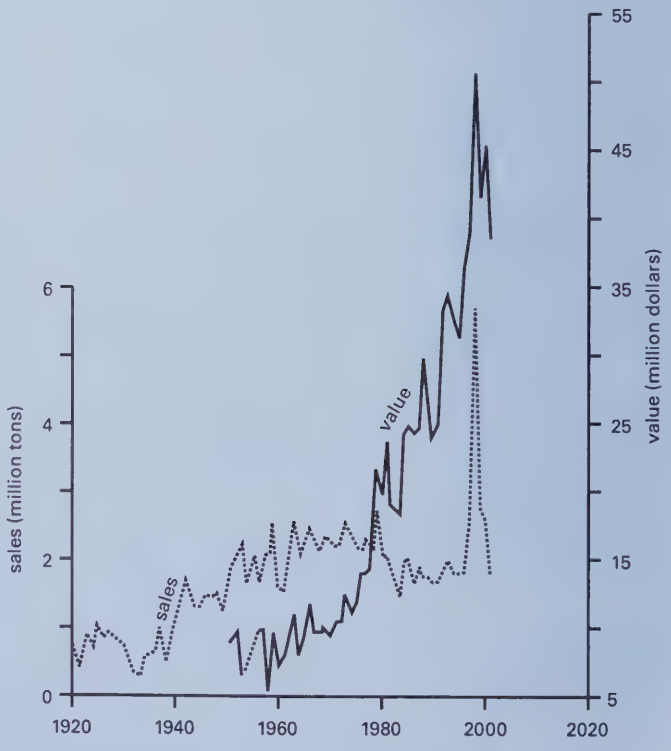


FIGURE 11.—Sales and value of sandstone and conglomerate. Value line dashed where data not available.

TABLE 24.—*2001 Ohio sales of crushed sandstone and conglomerate, by county and type*

County	Tons sold														
	Total	Foundry sand	Glass sand	Metallurgical pebble	Refractory	Riprap	Aggregate	Silica flour	Polishing/ grinding sand	Fire and furnace sand	Engine sand	Frac sand	Construction	Industrial sand	Other/ unspecified
Belmont	10,219					10,219									
Columbiana	28,654					12,487	15,487						680		
Fairfield	27,000														27,000
Geauga	849,263	71,083	191,938	1,583	17,437		48,700		30,017		4,284	5,216	98,636	33,891	346,478
Knox	122,116		52,347					8,529			6,564	126		54,550	
Lake	84,352						50,532						33,820		
Perry	186,340		90,207		5,241			89,481				1,411			
Pike	120,378	24,931	645	1,321	4,055				53		1,055		1,752	9,296	77,270
Portage	35,639														35,639
Summit	3,196					3,196									
Trumbull	160,524						80,000						80,524		
Tuscarawas	14,250	12,750											1,500		
Wayne	76,573												76,573		
TOTAL	1,718,504	108,764	335,137	2,904	26,733	25,902	194,719	98,010	30,070		11,903	6,753	293,485	97,737	486,387

TABLE 25.—*2001 Ohio sales of dimension sandstone, by county and type*

County	Tons sold									
	Total	Refractory	Rough construction	Rubble	Grindstones	Rough architectural	Finished	Curbing	Flagging	Other/ unspecified
Coshocton	23,919		23,919							
Erie	6,878		1,134	44			5,700			
Huron	3,716		3,716							
Knox	2,243		2,243							
Scioto	13,440		13,440							
Trumbull	1									1
TOTAL	50,197		44,452	44			5,700			1

CLAY

Clay was sold or produced by 40 companies at 50 operations in 27 Ohio counties during 2001. Clay sales (including material for captive use) totaled 1,730,151 tons (-16.6 percent from 2000); Tuscarawas, Columbiana, Ottawa, Stark, and Paulding Counties accounted for 57.5 percent of the total sales. National rankings for clay are included with Shale.

[11]Includes reported and estimated values. See footnote 1, p. 9.

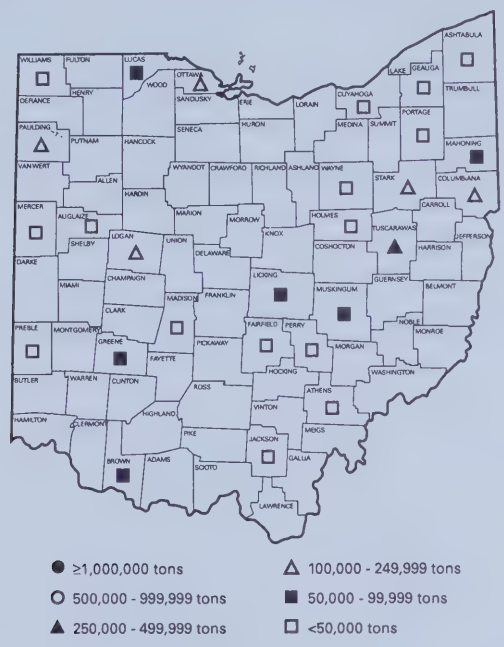


FIGURE 12.—Clay sales in Ohio in 2001, by county.

Reported known production of clay was 1,730,172 tons. The total value[11] of clay sold (including material for captive use) in 2001 was $7,648,956. Average price per ton was $4.42.

An annual average of 25 employees worked an average of 118 days in 2001 mining clay. Total wages of $866,371 were paid to a total of 41 employees (25 production employees and 16 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $21,131. An additional 93 people (62 production employees and 31 nonproduction employees) were employed by operations mining clay along with one or more other mineral commodities.

Clay mined in Ohio in 2001 was used largely for captive use in the landfill industry and the production of common clay products.

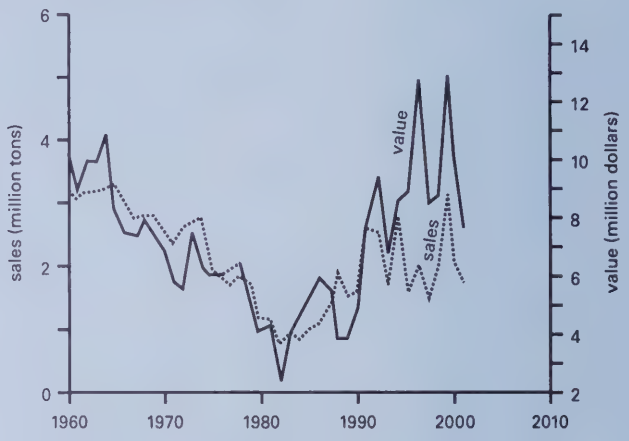


FIGURE 13.—Sales and value of clay in Ohio. Value line dashed where data not available.

TABLE 26.—*2001 Ohio clay sales, by county and type*

County	Tons sold								
	Total	Common clay products	Stoneware	Vitrified products	Cement manufacture	Refractories	Construction	Landfill use	Other/ unspecified
Ashtabula	9,505						9,505		
Athens	1,060								1,060
Auglaize	5,554	5,554							
Brown	51,161							51,161	
Columbiana	246,609	77,531		117,655	3,138		285	48,000	
Cuyahoga	30,489	30,489							
Fairfield	33,335							33,335	
Geauga	728						728		
Greene	89,954				396				89,558
Holmes	3,119	3,119							
Jackson	48,105	44,989							3,116
Licking	60,650							60,650	
Logan	120,923							120,923	
Lucas	69,255							69,255	
Madison	32								32
Mahoning	84,328				16,864	4,428			63,036
Mercer	20,725							20,725	
Muskingum	67,086	32,586						34,500	
Ottawa	153,177							153,177	
Paulding	132,036				132,036				
Perry	31,903	31,903							
Portage	2,186						2,186		
Preble	1,696						1,696		
Stark	140,942	20,265		11,590				109,087	
Tuscarawas	321,293	282,873		38,420					
Wayne	4,155						4,155		
Williams	145	145							
TOTAL	1,730,151	529,454		167,665	152,434	4,428	18,555	700,813	156,802

SHALE

Shale was sold or produced by 23 companies at 30 operations in 19 Ohio counties during 2001. Shale sales (including material for captive use) totaled 1,528,067 tons (-39.7 percent from 2000); Hamilton, Tuscarawas, Cuyahoga, Marion, and Mahoning Counties accounted for 83.2 percent of the total sales. Reported known production of shale in 2001 was 1,494,767 tons. Ohio ranks 5th nationally in the production of common clay and shale out of 42 producing states. The top five states, in descending order of production, are North Carolina, Texas, Alabama, Georgia, and Ohio.[12] The total value[13] of shale sold (including material for captive use) in 2001 was $5,366,308. Average price per ton was $3.51.

An annual average of 25 employees worked an average of 181 days in 2001 mining shale. Total wages of $1,904,705 were paid to a total of 55 employees (25 production employees and 30 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $34,631. An additional 72 people (45 production employees and 27 nonproduction employees) were employed by operations mining shale along with one or more other mineral commodities.

Shale mined in Ohio was largely for captive use in the landfill industry, in the production of common clay products, and for lightweight aggregate.

[12]Information from U.S. Geological Survey.
[13]Includes reported and estimated values. See footnote 1, p. 9.

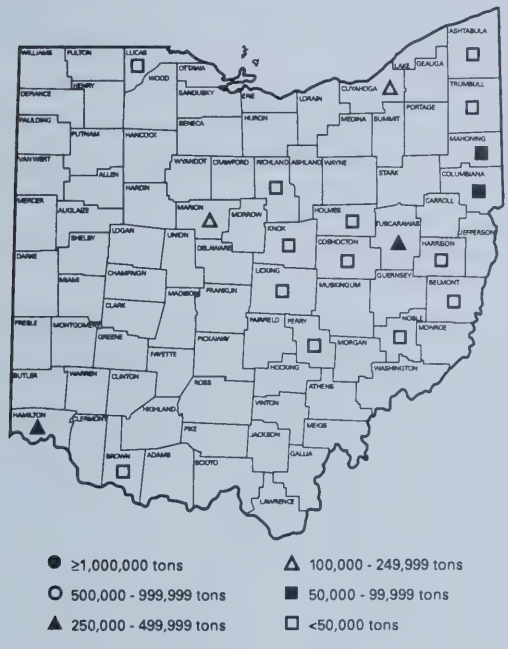


FIGURE 14.—Shale sales in Ohio in 2001, by county.

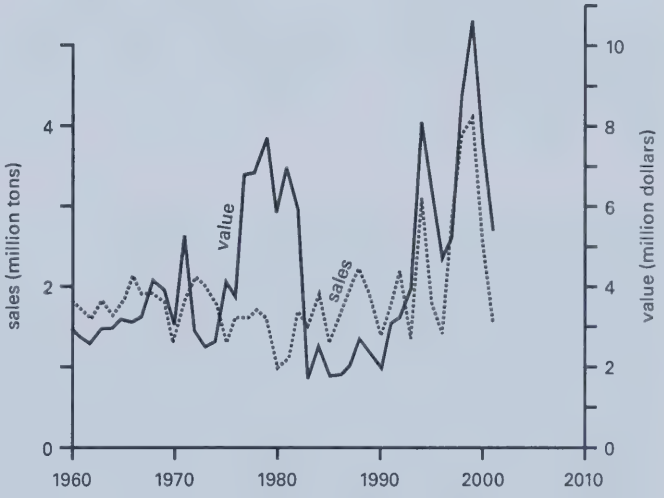


FIGURE 15.—Sales and value of shale in Ohio. Value line dashed where data not available.

TABLE 27.—*2001 Ohio shale sales, by county and type*

County	Tons sold							
	Total	Common clay products	Vitrified products	Cement manufacture	Lightweight aggregate	Construction	Landfill use	Other/ unspecified
Ashtabula	200				200			
Belmont	171					171		
Brown	49,113						49,113	
Columbiana	64,433	36,180						28,253
Coshocton	561				561			
Cuyahoga	245,658				245,658			
Hamilton	442,201					12,000	430,201	
Harrison	30,512	30,512						
Holmes	5,059	5,059						
Knox	2,700						2,700	
Licking	20,723	20,723						
Lucas	852					852		
Mahoning	66,174			66,174				
Marion	207,762	207,762						
Noble	160	160						
Perry	41,710	41,710						
Richland	15,189	15,189						
Trumbull	25,000				25,000			
Tuscarawas	309,889	302,683	5,500				1,706	
TOTAL	1,528,067	659,978	5,500	66,174	271,419	13,023	483,720	28,253

SALT

Salt was produced by 3 companies at 5 operations in 5 Ohio counties during 2001. Total tonnage of salt sold in 2001 amounted to 4,261,545 tons (-16.2 percent from 2000). Rock salt sales totaled 3,432,102 tons from 2 underground mines, one each in Cuyahoga and Lake Counties. Three brining operations, one each in Licking, Summit, and Wayne Counties, sold a total of 6,144 tons of salt in brine and 823,299 tons of evaporated salt. Reported known production of salt was 4,518,513 tons in 2001. The top five salt-producing states nationally are Louisiana, Texas, New York, Ohio, and Kansas.[14]

The total value[15] of the salt sold in 2001 was $89,840,924. Average price per ton of rock salt was $19.17 and of salt in brine and evaporated salt was $27.79. The average price per ton of all salt sold was $21.08.

An annual average of 270 employees worked an average of 268 days in 2001 to produce salt. Total wages of $17,729,768 were paid to a total of 434 employees (270 production employees and 164 nonproduction employees). The average annual wage, based on those employees for whom wages were reported, was $40,852. The primary use for Ohio salt was ice control. Salt also was used as an additive in animal feed, for cattle blocks, and as a commercial and residential water-softening agent.

GYPSUM

Gypsum was produced by 1 company at 1 operation in Ottawa County during 2001. Gypsum production and sales (all material was for captive use) totaled 117,003 tons (-49.2 percent from 2000). The reported value[16] of the gypsum sold was $1,469,558. Average price per ton was $12.56. Ohio ranks 16th nationally in the production of gypsum out of 19 producing states. The top five states, in descending order of production, are Oklahoma, Iowa, Nevada, Michigan, and Texas.[14]

An annual average of 3 employees worked 180 days in 2001 producing gypsum. Total wages of $195,980 were paid to a total of 4 employees (3 production employees and 1 nonproduction employees). The average annual wage in 2001 was $48,995. The sole use of gypsum from this operation is for the manufacture of wallboard. The quarry and wallboard plant were closed July 31, 2001.

PEAT

No peat was produced or sold in Ohio during 2001.

[14]Information from U.S. Geological Survey.
[15]Includes reported and estimated values. See footnote 1, p. 9.
[16]Includes estimated values only. See footnote 1, p. 9.

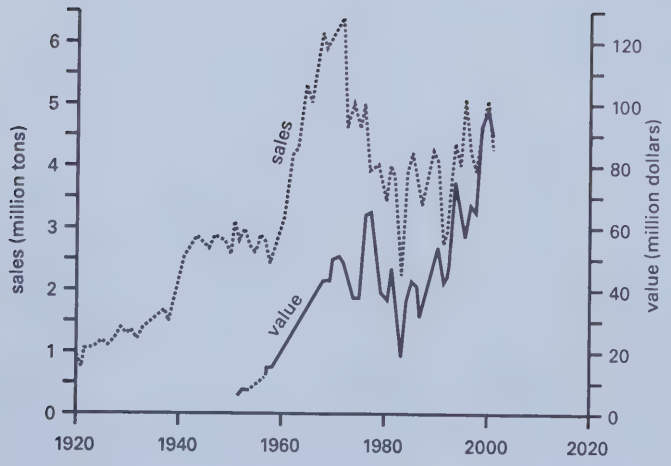


FIGURE 16.—Sales and value of salt in Ohio. Value line dashed where data not available.

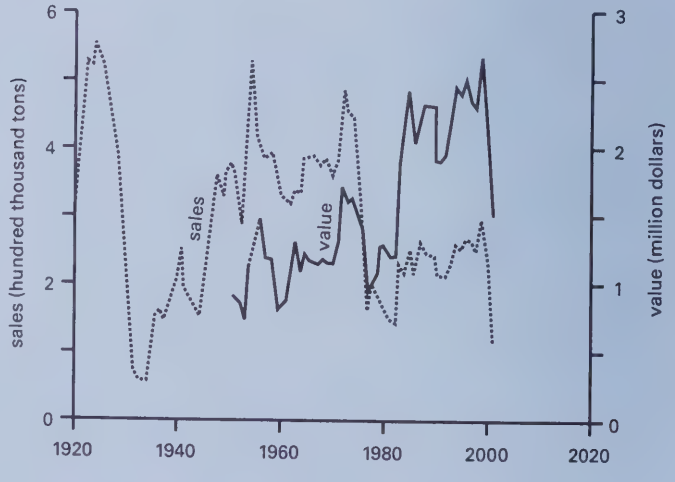


FIGURE 17.—Sales and value of gypsum in Ohio. Value line dashed where data not available. Some figures were calculated because actual figures were not reported in order to maintain confidentiality.

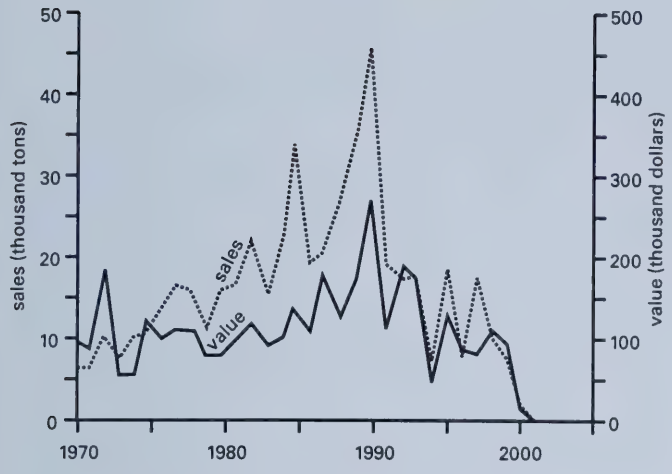


FIGURE 18.—Sales and value of peat in Ohio.

FIGURE 19.—Counties producing salt and gypsum in Ohio in 2001, and their ranking in sales. There was no peat production in Ohio in 2001.

A Gradall XL 5110 scaler is operated by Jason Julian at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The face, ribs, and roof are scaled to remove the loose rock. The scaler follows after the loader has "mucked out" a shot face and the operator has made sure that the room is safe to enter for drilling and loading. The scaler and the roof-bolter make sure that there is no loose rock that may be a hazard to workers.

OIL AND GAS

This information is summarized from the 2001 Ohio Department of Natural Resources, Division of Mineral Resources Annual Report.

The Division of Mineral Resources Management estimates that 677 wells were drilled in 2001, an increase of 113 wells from 2000. Wells were drilled in 42 of Ohio's 88 counties, an increase of 4 counties from 2000. The top 10 counties in number of new wells drilled in 2001 were Muskingum (64), Noble (50), Stark (46), Wayne (46), Ashtabula (40), Coshocton (40), Washington (39), Tuscarawas (34), Lawrence (31), and Mahoning (28). The Division received 600 well completion reports; 512 wells were productive and 88 were dry holes for a completion rate of 85.3 percent.

The total reported crude oil production in Ohio in 2001 was 6,049,524 barrels, an 8.0 percent decrease from 2000. Through 2001, Ohio wells have produced 1,087,214,722 barrels of crude oil. The dollar value of crude oil produced in Ohio in 2001 was $132,121,604, a decrease of 24.9 percent. Average price per barrel in 2001 was $21.84, an 18.4 percent decrease from the 2000 price.

Natural gas production in Ohio in 2001 was 98,255,015 MCF, a 0.3 percent decrease from 2000. This production figure includes an estimated 1,982,550 MCF of gas used on the lease. Through 2001, Ohio wells have produced 7,728,654,086 MCF of natural gas. The dollar value of natural gas produced in Ohio in 2001 was $441,459,782 an increase of 10.5 percent from 2000. The value of the estimated volume of gas used on the lease was not used in computing the total dollar value. The average price per MCF in 2001 was $4.43, an increase of $0.43 per MCF from 2000.

The combined total value of Ohio oil and gas production in 2001 was $573,581,386, a decrease of 0.3 percent from 2000.

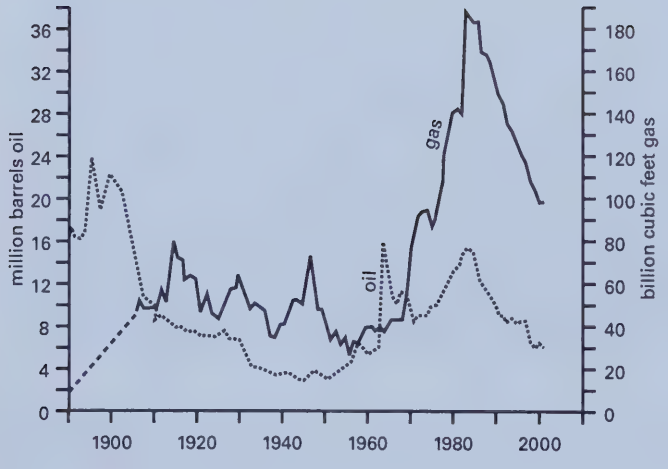


FIGURE 20.—Production of oil and gas in Ohio.

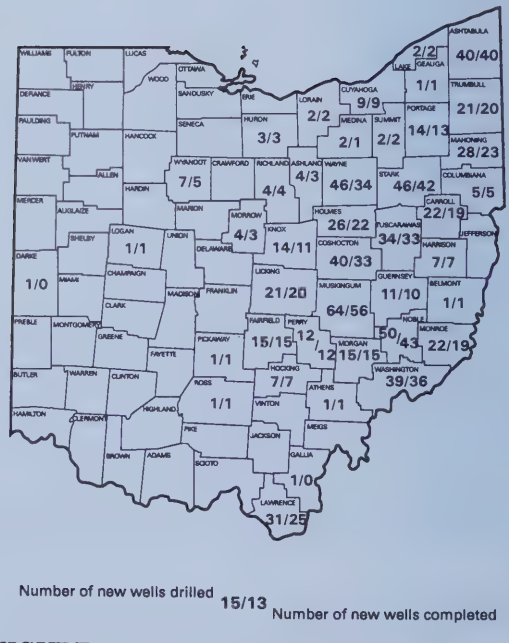


FIGURE 21.—New wells drilled for oil and gas in 2001, by county.

TABLE 28.—*2001 Ohio summary of new oil and gas well completions by county*

County[1]	Development wells		Exploratory wells		Total wells	Percent productive	Drilled footage		
	Productive	Dry	Productive	Dry			Productive	Dry	Total
Ashland	2	1	0	0	3	66.67	3,602	2,981	6,583
Ashtabula	24	7	7	2	40	77.50	138,715	50,226	188,941
Athens	1	0	0	0	1	100.00	1,665	0	1,665
Belmont	1	0	0	0	1	100.00	2,300	0	2,300
Carroll	16	0	2	1	19	94.74	88,460	1,024	89,484
Columbiana	5	0	0	0	5	100.00	4,202	0	4,202
Coshocton	25	4	3	1	33	84.85	120,558	30,644	151,202
Cuyahoga	9	0	0	0	9	100.00	30,133	0	30,133
Fairfield	9	5	0	1	15	60.00	35,807	23,493	59,300
Geauga	0	1	0	0	1	0.00	0	4,205	4,205
Guernsey	5	3	2	0	10	70.00	45,828	15,076	60,904
Harrison	6	1	0	0	7	85.71	29,219	5,600	34,819
Hocking	2	2	2	1	7	57.14	15,317	14,187	29,504
Holmes	16	4	1	1	22	77.27	70,905	28,807	99,712
Huron	2	0	1	0	3	100.00	11,958	0	11,958
Knox	8	0	1	2	11	81.82	29,348	10,526	39,874
Lake	1	0	0	1	2	50.00	2,950	5,807	8,757
Lawrence	25	0	0	0	25	100.00	55,889	0	55,889
Licking	11	2	5	2	20	80.00	55,072	20,246	75,318
Logan	0	0	0	1	1	0.00	0	1,800	1,800
Lorain	0	0	0	2	2	0.00	0	9,250	9,250
Mahoning	23	0	0	0	23	100.00	124,160	0	124,160
Medina	0	0	0	1	1	0.00	0	5,855	5,855
Monroe	19	0	0	0	19	100.00	50,694	0	50,694
Morgan	15	0	0	0	15	100.00	75,313	0	75,313
Morrow	1	2	0	0	3	33.33	3,203	7,416	10,619
Muskingum	42	6	6	2	56	85.71	245,095	49,551	294,646
Noble	43	0	0	0	43	100.00	240,049	0	240,049
Perry	7	3	0	2	12	58.33	16,707	20,913	37,620
Pickaway	0	0	0	1	1	0.00	0	2,686	2,686
Portage	13	0	0	0	13	100.00	70,286	0	70,286
Richland	1	2	1	0	4	50.00	5,842	6,903	12,745
Ross	0	0	0	1	1	0.00	0	3,317	3,317
Stark	41	1	0	0	42	97.62	226,422	7,532	233,954
Summit	2	0	0	0	2	100.00	8,439	0	8,439
Trumbull	20	0	0	0	20	100.00	99,441	0	99,441
Tuscarawas	26	2	4	1	33	90.91	164,609	21,982	186,591
Washington	36	0	0	0	36	100.00	178,877	0	178,877
Wayne	20	11	0	3	34	58.82	88,392	72,830	161,222
Wyandot	0	0	0	5	5	0.00	0	10,859	10,859
TOTAL	477	57	35	31	600	85.33	2,339,457	433,716	2,773,173

[1] One well was drilled but not completed in both Darke and Gallia Counties in 2001. No wells were drilled in these counties in 2001: Adams, Allen, Auglaize, Brown, Butler, Champaign, Clark, Clermont, Clinton, Crawford, Defiance, Delaware, Erie, Fayette, Franklin, Fulton, Greene, Hamilton, Hancock, Hardin, Henry, Highland, Jackson, Jefferson, Lucas, Madison, Marion, Meigs, Mercer, Miami, Montgomery, Ottawa, Paulding, Pike, Preble, Putnam, Sandusky, Scioto, Seneca, Shelby, Union, Van Wert, Vinton, Warren, Williams, Wood.

TABLE 29.—*2001 Ohio summary of new oil and gas well completions by geologic unit*

Geologic unit	No. of producing wells	No. of dry holes	Total no. of wells	Percent productive	Total footage
Pennsylvanian undifferentiated	15	0	15	100.00	12,931
Upper Mississippian undifferentiated	2	0	2	100.00	2,840
Lower Mississippian "1st & 2nd Berea"	28	2	30	93.33	42,611
Devonian					
Ohio Shale	25	0	25	100.00	65,686
Oriskany	5	2	7	71.43	26,139
Silurian					
Bass Islands	2	0	2	100.00	3,692
"Clinton-Medina"	330	7	337	97.92	1,614,850
Lower Ordovician					
"Utica"-"Gull River"	5	4	9	55.56	35,208
Beekmantown	20	3	23	86.96	152,995
Cambrian-Ordovician					
Rose Run	60	44	104	57.69	596,835
Cambrian					
Trempealeau	20	22	42	47.62	205,951
Kerbel-Mt. Simon	0	4	4	0.00	13,435
TOTAL	512	88	600	85.33	2,773,173

TABLE 30.—*Ohio counties[1] and their state mine number abbreviations[2]*

County	*Abbreviation*	*County*	*Abbreviation*	*County*	*Abbreviation*
Adams	Ads	Hamilton	Hmn	Noble	Ne
Allen	An	Hancock	Hk	Ottawa	Oa
Ashland	Ald	Hardin	Hdn	Paulding	Pg
Ashtabula	Asa	Harrison	Hn	Perry	Py
Athens	As	Henry	Hy	Pickaway	Pky
Auglaize	Ae	Highland	Hd	Pike	Pke
Belmont	Bt	Hocking	Hg	Portage	Pe
Brown	Bn	Holmes	Hs	Preble	Pre
Butler	Br	Huron	Hrn	Putnam	Pm
Carroll	Cl	Jackson	Jkn	Richland	Rd
Champaign	Cpn	Jefferson	Jfn	Ross	Rs
Clark	Ck	Knox	Kx	Sandusky	Sy
Clermont	Ct	Lake	Lke	Scioto	So
Clinton	Cln	Lawrence	Le	Seneca	Sa
Columbiana	Ca	Licking	Lg	Shelby	Shy
Coshocton	Cn	Logan	Lgn	Stark	Sk
Crawford	Cd	Lorain	Ln	Summit	St
Cuyahoga	Cya	Lucas	Ls	Trumbull	Tl
Darke	Dke	Madison	Mdn	Tuscarawas	Ts
Defiance	De	Mahoning	Mg	Union	Un
Delaware	Del	Marion	Mn	Van Wert	Vt
Erie	Ee	Medina	Ma	Vinton	Vn
Fairfield	Fd	Meigs	Ms	Warren	Wan
Fayette	Fe	Mercer	Mr	Washington	Wn
Franklin	Fn	Miami	Mi	Wayne	We
Fulton	Ftn	Monroe	Me	Williams	Ws
Gallia	Ga	Montgomery	My	Wood	Wd
Geauga	Gea	Morgan	Mon	Wyandot	Wt
Greene	Ge	Morrow	Mw		
Guernsey	Gy	Muskingum	Mum		

[1]Defiance and Henry Counties reported no production or sales of mineral commodities in 2001.
[2]As used for state mine numbers.

2001 COAL COMPANIES WITH SALES OR PRODUCTION

Company	Number of mines	Production (tons)	Sales (tons)
AEP Ohio Coal, L.L.C.	1[1]	271,604	226,905
American Energy Corp.	1	481,219	468,346
Anthony Mining Co., Inc.	1	140,081	140,081
B & N Coal, Inc.	6	549,855	549,855
Belden Brick Co.	3	37,117	37,117
Bennoc, Inc.	1	27,845	27,485
Blue Jay Enterprises of Ts. Co., Inc.	1	1,769	1,769
Buckeye Industrial Mining Co.	9	578,903	578,903
Buckingham Coal Co., Inc.	1	1,248,192	1,241,897
C & E Coal, Inc.	1	28,764	28,764
CONSOL Energy, Inc.	5	2,839,529	2,673,564
Central Ohio Coal Co.	1[2]	156,605	156,605
Cravat Coal Co.	4	648,099	647,954
D. & D. Mining Co.	1	423	423
Daron Coal Co., Inc.	1	429,544	427,919
ENZ, Inc.	1	266,134	266,134
ESSROC Cement Corp.	1	3,569	3,569
East Fairfield Coal Co.	1	3,219	3,219
F. & M. Coal Co.	1	23,756	23,756
Franklin Mineral	1	7,604	7,604
Harrison Mining Corp.	1	1,791,010	1,496,173
Holmes Limestone Co.	8	661,084	661,084
K.C.C.I.	1	5,174	5,174
Kimble Clay & Limestone Co.	8[3]	417,108	417,108
L & M Mineral Co.	1	9,382	9,382
Marietta Coal Co.	11	594,648	594,152
Myers Mining	1	36,341	36,341
Ohio River Collieries, Inc.	1	2,611	3,093
Ohio Valley Coal Co.	1	4,611,287	4,618,129
Oxford Mining Co., Inc	10	3,128,508	3,128,508
Sands Hill Coal Co., Inc.	8	1,263,668	1,263,668
Schaney Mining	2	10,961	10,961
Schiappa Coal Co., Inc.	1	120,422	120,422
Sidwell Materials, Inc.	2	27,188	27,188
Southern Ohio Coal Co.	2[4]	2,432,869	2,407,770
State Line Resources, Inc.	2	23,431	23,431
Sterling Mining Co.	3	465,404	465,404
Thompson Bros. Mining Co.	1	10,087	10,087
Valley Mining, Inc.	5	539,425	539,425
Varkony Mining Co.	1	4,384	4,384
Waterloo Coal Co., Inc.	4	1,891,720	1,891,720
TOTAL: 41 companies	111	25,790,543	25,245,473

[1]This mine was operated by Harrison Mining Corp. January through October 2001 and is not included in the total number of mines.

[2]This mine was operated by CONSOL Energy, Inc., July through December 2001 and is not included in the total number of mines.

[3]One of these mines was operated by Marietta Coal Co. January through May 2001 and is not included in the total number of mines.

[4]These mines were operated by CONSOL Energy, Inc., July through December 2001 and are not included in the total number of mines.

2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Bt-C).
The designation (u) following the map-location number indicates an underground mine.
To convert short tons to metric tons, multiply the given tonnage by 0.907185.

Name, address, telephone number, and president/ owner/ manager of company	Name of mine (and map location number)	County	2001 production (tons)	State mine number	Mining and reclamation permit number
AEP Ohio Coal, L.L.C. P.O. Box 176 Cadiz, OH 43907 740-942-8220 C. A. Ebetino, Jr., pres.	Nelms Mine-Cadiz Portal (580) (u)	Harrison	271,604	Hn-710[1]	D-0426
American Energy Corp. 43521 Mayhugh Hill Rd., TR 88 Beallsville, OH 43950 740-926-9152 Robert Moore, pres.	Century Mine (890) (u)	Belmont	481,219	Bt-67	D-0425
Anthony Mining Co., Inc. P.O. Box 1298 Steubenville, OH 43952 740-765-4185 Albert Carapellotti, pres.	Lions Club (844)	Jefferson	140,081	Jfn-AN	D-1173
B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727 740-783-3575 Carl Baker, Jr., pres.	Ullman (514)	Noble	104,291	Ne-151	D-0807
	Lee (627)	Noble	35,819	Ne-155	D-0958
	Estadt (760)	Noble	16,904	Ne-BN	D-1038
	Barnes Ridge (799)	Noble	257,926	Ne-BN2	D-1122
	Friday (866)	Noble	36,163	Ne-BN3	D-1194
	Shilling (493)	Washington	98,752	Ne-1008	D-0706
Belden Brick Co. P.O. Box 20910 Canton, OH 44701 330-852-2424 Robert F. Belden, pres.	Moomaw Pit (667)	Tuscarawas	16,096	Ts-1517	IM-46
	Belden Pit (261)	Tuscarawas	2,121	Ts-1646	IM-44
	Wallick Pit (720)	Tuscarawas	18,900	Ts-1841	IM-45
Bennoc, Inc. P.O. Box 208 Morristown, OH 43759 740-782-1330 Larry Conway, pres.	Bennoc, Inc. (832)	Belmont	27,845	Bt-BE	D-1159
Blue Jay Enterprises of Ts. Co., Inc. P.O. Box 641 Zoar, OH 44697 330-874-2048 Leland D. Ervin, pres.	Blue Jay #1 (828)	Tuscarawas	1,769	Ts-BJ	IM-1285
Buckeye Industrial Mining Co. P.O. Box 389 Lisbon, OH 44432 330-337-9511 John C. Grisham, pres.	Starkey (897)	Carroll	39,902	Cl-B2	D-2103
	Mountain Spring #11 (790) (u)	Columbiana	1,900	Ca-1003	D-0928
	Ingledue (856)	Columbiana	161,260	Ca-B1	D-2003
	Snyder Deep Mine #10 (876) (u)	Jefferson	141,906	Jfn-BI	D-1180
	Close (802)	Stark	8,325	Sk-B	D-1123
	Anthony (877)	Stark	28,074	Sk-B2	D-2048
	Finnie (878)	Stark	89,210	Sk-B3	D-2062
	Baird (907)	Stark	107,624	Sk-B5	D-2096
	Henning (908)	Stark	702	Sk-B6	D-2129
Buckingham Coal Co., Inc. P.O. Box 157 Glouster, OH 45732-0157 740-767-9902 James F. Graham, pres.	Buckingham Mine No. 2 (851) (u)	Athens	1,248,192	As-B	D-1163

[1]This mine was operated January through October 2001 by Harrison Mining Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.

2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)

Name, address, telephone number, and president/ owner/ manager of company	Name of mine (and map location number)	County	2001 production (tons)	State mine number	Mining and reclamation permit number
C & E Coal, Inc. P.O. Box 333 Lisbon, OH 44432 330-424-3739 Amos L. Rawson, pres.	Dailey Pit (895)	Columbiana	28,764	Ca-CE2	D-2097
CONSOL Energy, Inc. 1800 Washington Rd. Pittsburgh, PA 15241-1421 412-831-4000 J. Brett Harvey, pres. & CEO	Mahoning Valley Mine 937 (150)	Harrison	377,299	Hn-700	D-51, D-54, D-334, D-414, D-784
	Dozer Pit (899)	Harrison	95,726	Hn-CON	D-2100
	Meigs Mine #31 (300) (u)	Meigs	748,057	Ms-293[2]	D-0354, D-0463
	Meigs Mine #2 (213) (u)	Meigs	1,110,424	Ms-294[2]	D-0355
	Muskingum Mine (228)	Morgan, Noble	508,023	Ne-41[3]	D-0678, D-1034, D-1084, D-2047
Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732-0098 740-962-2013 Gary Dimmerling, gen. mgr.	Muskingum Mine (228)	Morgan, Noble	156,605	Ne-41[3]	D-0678, D-1034, D-1084, D-2047
Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 740-942-4656 Michael T. Puskarich, pres.	Hendrysburg (884)	Belmont	284,852	Bt-C2	D-2028
	Johnen (891)	Belmont	326,368	Bt-C3	D-2087
	Poplar Ridge (900)	Harrison	2,512	Hn-C4	D-2131
	Prokes (903)	Jefferson	34,367	Jfn-C	D-2095
D. & D. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 330-549-3127 Donald Thompson, pres.	D. & D. Strip (441)	Columbiana	423	Ca-348	D-1002
Daron Coal Co., Inc. 42600 Deersville Ridge Rd. Cadiz, OH 43907 740-942-8223 Chuck Ungurean, pres.	Standingstone Mine (860)	Harrison	429,544	Hn-D	D-1181
ENZ, Inc. P.O. Box 405 Magnolia, OH 44643 330-866-4510 James R. Demuth, pres.	Sickafoose Pit (246)	Stark	266,134	Sk-208	D-1015
ESSROC Cement Corp. P.O. Box 779 Bessemer, PA 16112 724-667-7702 George Gregory, pres.	Bessemer Pit (625)	Mahoning	3,569	Mg-608	IM-4
East Fairfield Coal Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452-0217 330-549-2165 W. Thomas Mackall, pres.	Withers-Petersburg (846)	Mahoning	3,219	Mg-E	IM-1103
F. & M. Coal Co. 3925 County Rd. 56 Toronto, OH 43964 740-544-5203 Edward Fiala, partner	F. & M. Strip (826)	Jefferson	23,756	Jfn-FM	D-1147

[2]This mine was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.
[3]This mine was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)

Name, address, telephone number, and president/ owner/ manager of company	Name of mine (and map location number)	County	2001 production (tons)	State mine number	Mining and reclamation permit number
Franklin Mineral P.O. Box 207 Dundee, OH 44624 330-827-3135 Thomas Flynn, pres.	Franklin Mineral Kohl Pit 1 (880)	Tuscarawas	7,604	Ts-F	D-1189
Harrison Mining Corp. P.O. Box 176 Cadiz, OH 43907 740-942-8220 Donn A. Chichering, pres.	Nelms Mine-Cadiz Portal (580) (u)	Harrison	1,791,010	Hn-710[4]	D-0426
Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 330-893-2721 Merle Mullet, pres.	Plainfield (898)	Coshocton	14,653	Cn-H2	D-2115
	Miley-Patterson (874)	Coshocton	49,163	Cn-HL1	D-2019
	Walnut Creek (841)	Holmes	141,190	Hs-H1	D-1176
	Bolivar (363)	Stark	57,405	Sk-235	D-0865
	E. Canton-Thomas (879)	Stark	139,432	Sk-H1	D-2011
	Dennison-R & F (723)	Tuscarawas	96,547	Ts-2043	D-1047
	Stone Creek-Spring (850)	Tuscarawas	1,302	Ts-H4	D-1149
	Stone Creek-Costain (881)	Tuscarawas	161,392	Ts-H5	D-0533
K.C.C.I. P.O. Box 1298 Steubenville, OH 43952 740-543-4389 David Krulock, pres.	Apex (796)	Jefferson	5,174	Jfn-K	IM-1164
Kimble Clay & Limestone Co. 3596 State Route 39 W Dover, OH 44622-9801 330-343-1226 Keith B. Kimble, pres.	Kimble Clay & Limestone Co. (262)	Tuscarawas	33,265	Ts-1727	IM-9
	Kimble Clay & Limestone Co. (598)	Tuscarawas	6,179	Ts-2019	D-0852
	Kimble Clay & Kimestone Co. (888)	Tuscarawas	54,089	Ts-H6	D-1188
	Kimble Clay & Limestone Co. (784)	Tuscarawas	1,377	Ts-K4	D-1079
	Kimble Clay & Limestone Co. (830)	Tuscarawas	1,823	Ts-K5	D-1133
	Kimble Clay & Limestone Co. (868)	Tuscarawas	89,165	Ts-K6	D-1183
	Kimble Clay & Limestone Co. (909)	Tuscarawas	214,356	Ts-K7	D-2079
	Kimble Clay & Limestone Co. (910)	Tuscarawas	16,854	Ts-M[5]	D-2066
L & M Mineral Co. 5205 State Route 39 Millersburg, OH 44654 330-893-2227 John E. Ling, Jr., pres.	Luikart (267)	Tuscarawas	9,382	Ts-1914	D-0701
Marietta Coal Co. 67705 Friends Church Rd. St. Clairsville, OH 43950 740-695-2197 Michael Jamison, pres.	Refuse Site (424)	Belmont	499	Bt-1150	D-0478, D-0597
	Hostetler-Hapapuro (810)	Belmont	112,793	Bt-1171	D-0674
	Fairpoint (892)	Belmont	31,502	Bt-M10	D-2124
	Johnson-Wozniak (812)	Belmont	53,627	Bt-M4	D-1135
	McGraw (833)	Belmont	157,182	Bt-M7	D-1171
	Senakiewich (852)	Belmont	17,008	Bt-M8	D-1190
	Mauersberger (870)	Belmont	46,224	Bt-M9	D-2075
	St. Joe (871)	Belmont	43,120	Bt-MC	D-2055
	Krulock-Hannan (872)	Belmont	31,046	Bt-MC1	D-2077
	Cochran/SWAD (57)	Belmont	86,801	Bt-P	D-0500
	Linden Valley (910)	Tuscarawas	14,846	Ts-M[5]	D-2066
Myers Mining P.O. Box 218 Carrollton, OH 44615 330-739-2009 Benjamin A. Erb, owner	Harlem #7 (854)	Carroll	36,341	Cl-M2	D-2014

[4]This mine was operated January through October 2001 by Harrison Mining Corp. and November and December by AEP Ohio Coal, L.L.C.
[5]This mine was operated January through May 2001 by Marietta Coal Company and June through December 2001 by Kimble Clay & Limestone Co.

2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)

Name, address, telephone number, and president/ owner/ manager of company	Name of mine (and map location number)	County	2001 production (tons)	State mine number	Mining and reclamation permit number
Ohio River Collieries, Inc. P.O. Box 128 Bannock, OH 43972 740-968-3582 Anthony Gentile, pres.	7400 Sulek (27)	Belmont	2,611	Bt-1074	D-0340
Ohio Valley Coal Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 740-926-1351 John Forrelli, pres.	Powhatan No. 6 (3) (u)	Belmont	4,611,287	Bt-68	D-0360
Oxford Mining Co., Inc. 544 Chestnut St. P.O. Box 427 Coshocton, OH 43812 740-622-6302 Charles C. Ungurean, pres.	Jeffco (567)	Belmont	207,729	Bt-1186	D-0877
	Boswell (885)	Belmont	364,265	Bt-OX	D-0676
	Egypt Valley East (893)	Belmont	22,902	Bt-OX1	D-0680
	Oxford Mining Co., Inc. (894)	Belmont	274,796	Bt-OX2	D-2122
	Martin (901)	Belmont, Harrison	119,348	Hn-O	D-2121
	McConnell (886)	Harrison	386,082	Hn-OX	D-2022
	Camp (887)	Muskingum	550,388	Mum-OX	D-1196
	Adamsville (905)	Muskingum	115,961	Mum-OX1	D-2008
	Adamsville East (906)	Muskingum	34,899	Mum-OX2	D-2110
	Z-Mack (764)	Perry	1,052,138	Py-O	D-1086
Sands Hill Coal Co., Inc. P.O. Box 650 Hamden, OH 45634-0650 740-384-4211 Alan C. Arthur, pres.	Coal Valley (787)	Gallia	166,404	Ga-629	D-1095
	Coal Valley (875)	Gallia	54,653	Ga-SH	D-2018
	Sands Hill Rockcamp II (843)	Jackson, Vinton	539,974	Jkn-S2	D-1087
	Lincoln (825)	Jackson	22,245	Jkn-S3	D-1137
	Pearce (862)	Jackson	138,739	Jkn-S4	D-2009
	Elk (869)	Vinton	69,186	Vn-S2	D-1193
	Elk (883)	Vinton	241,113	Vn-S3	D-2058
	Big Valley (911)	Vinton	31,354	Vn-S4	D-2114
Schaney Mining 47134 Giacobbi Rd. Jewett, OH 43986 740-937-2515 Melvin Schaney, owner	Melvin Schaney (902)	Harrison	7,159	Hn-SC	D-1151
	Melvin Schaney (861)	Harrison	3,802	Hn-SM	D-1186
Schiappa Coal Co., Inc. State Route 43 Canton Rd. P.O. Box 728 Steubenville, OH 43952 740-282-5301 Teresa C. Schiappa, pres.	Cherry Valley (795)	Harrison	120,422	Hn-767	D-1124
Sidwell Materials, Inc. 4620 Limestone Valley Rd. Zanesville, OH 43701 740-849-2394 Jeffrey R. Sidwell, pres.	Bellaire Stone (603)	Belmont	19,073	Bt-1190	IM-1089, D-1061
	Uniontown (683)	Belmont	8,115	Bt-B	D-0998
Southern Ohio Coal Co. P.O. Box 490 Athens, OH 45701 740-286-5051 Charles A. Ebetino, gen. mgr.	Meigs Mine #31 (300) (u)	Meigs	1,087,521	Ms-293[6]	D-0354, D-0463
	Meigs Mine #2 (213) (u)	Meigs	1,345,348	Ms-294[6]	D-0355
State Line Resources, Inc. P.O. Box 419 Negley, OH 44441 330-426-9611 Charles H. Muse, Jr., pres.	State Line Resources, Inc. (855)	Columbiana	14,059	Ca-505	IM-13, IM-936
	Grimm Mine (896)	Columbiana	9,372	Ca-S1	D-2063

[6]This mine was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

2001 OHIO ALPHABETICAL DIRECTORY OF PRODUCING COAL-MINE OPERATORS (cont.)

Name, address, telephone number, and president/ owner/ manager of company	Name of mine (and map location number)	County	2001 production (tons)	State mine number	Mining and reclamation permit number
Sterling Mining Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452 330-549-2165 W. Thomas Mackall, pres.	Carroll Hollow (873) Sterling North (657) (u) Sterling South (758) (u)	Carroll Jefferson Jefferson	38,020 193,512 233,872	Cl-S Jfn-823 Jfn-ST	D-2070 D-0949 D-1019
Thompson Bros. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 330-549-3979 J. E. Thompson, owner	North Lima Mine (864)	Mahoning	10,087	Mg-T	D-1168
Valley Mining, Inc. 4412 Pleasant Valley Rd. SE Dennison, OH 44621 740-922-3942 Mary J. Brown, pres.	Egypt Valley (732) Snyder-Bush (696) Piergallini (709) Hamilton (904) Braver (889)	Belmont Guernsey Jefferson Jefferson Tuscarawas	358,519 8,327 53,899 81,322 37,358	Bt-VM Gy-318 Jfn-831 Jfn-V1 Ts-V2	D-1059 D-1025 D-1026 D-1156 D-2013
Varkony Mining Co. P.O. Box 427 Hopedale, OH 43976 740-937-2777 Stephen & William Varkony, partners	JWP (863)	Jefferson	4,384	Jfn-V2	D-1185
Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Bowman Strip (165) Mitchell Hollow Pit (357) Allied Pit (420) Dundas Pit (602)	Jackson Vinton Vinton Vinton	874,604 36,589 143,806 836,721	Jkn-367 Vn-172 Vn-184 Vn-191	D-0594, D-968, D-1083, D-1167, D-2059 D-0445 D-0609 D-0867, D-0957, D-1004

2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND ASSOCIATED FACILITIES, BY COUNTY

For those mines that have not been assigned a state mine number, a letter designation is used (example: Bt-C).

County	Name, address, telephone number, and president/owner/ manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Mining and reclamation permit number	Type of facility
Belmont	Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 740-942-4656 Michael Puskarich, pres.	Bellaire Dock	Pultney	Bt-876	D-0687	loading dock
	Marietta Coal Co. 67705 Friends Church Rd. St. Clairsville, OH 43950 740-695-2197 George Nicolozakes, pres.	Loading Dock (3)	Pultney	Bt-936	D-0216	loading dock, prep plant—jig, flotation, centrifugal dryer, crushers, screens
	Ohio River Collieries, Inc. P.O. Box 128 Bannock, OH 43972 740-968-3582 Tony Gentile, pres.	Lafferty Tipple Lafferty Truck Shop	Union Union	Bt-947 Bt-1093	D-0773 D-0773	tipple shop
	Ohio Valley Coal Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 740-926-1351 John Forelli, pres.	Powhatan #6 (4)	Smith, Washington	Bt-68	D-0360	prep plant—jigs, cyclones, centrifuges, thickeners, filters, screens
	Ohio Valley Transloading Co. 56854 Pleasant Ridge Rd. Alledonia, OH 43902 216-765-1240 Robert E. Murray, pres.	Harbour Facility	York	Bt-1198		dock
	Rayle River Coal 67705 Friends Church Rd. St. Clairsville, OH 43950 740-695-2197 George Nicolozakes, pres.	Rayle River Terminal	Pultney	Bt-1191		coal transfer facility
Columbiana	Buckeye Industrial Mining Co. P.O. Box 389 Lisbon, OH 44432 330-337-9511 John C. Grisham, pres.	Kensington Preparation Plant (5)	West	Ca-879	D-0806	prep plant—heavy-media washer, cyclone, centrifuges, breaker
	State Line Resources, Inc. P.O. Box 419 Negley, OH 44441 330-426-9611 Charles H. Muse, Jr., pres.	State Line Resources, Inc. (33)	Middleton	Ca-505	D-0223	prep plant—crushers, cyclones, screens
Coshocton	Conesville Coal Preparation Co. 14561 Twp. Rd. 263 Conesville, OH 43811 740-829-2392 H. D. Leppla, gen. mgr.	Conesville Coal Preparation Co. (7)	Franklin	Cn-810		prep plant—jig, cyclones, froth cells, flotation, filter press, screens, dryers
	Oxford Mining Co., Inc. 544 Chestnut St. P.O. Box 427 Coshocton, OH 43812 740-622-6302 Charles C. Ungurean, pres.	Lori Tipple	Franklin	Cn-736	D-0671	tipple

2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND ASSOCIATED FACILITIES, BY COUNTY (cont.)

County	Name, address, telephone number, and president/owner/ manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Mining and reclamation permit number	Type of facility
	Sugarcreek Clay & Limestone, Inc. P.O. Box 402 Sugarcreek, OH 44681 330-852-4440 Daniel D. Miller, pres.	Sugarcreek Tipple	Crawford	Cn-825	D-0801	tipple
Gallia	McCarthy Construction 60 Dickason St. Jackson, OH 45640 740-286-7501 Rick McCarthy, owner	Conrick Dock	Addison	Ga-216	D-0739	dock
	Sands Hill Coal Co., Inc. P.O. Box 650 Hamden, OH 45634-0650 740-384-4211 Alan C. Arthur, pres.	Sands Hill Coal Co., Inc.	Addison	Ga-183	D-0834	tipple
	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Waterloo Dock #1	Addison	Ga-229	D-0725	dock, tipple
Harrison	AEP Ohio Coal, L.L.C. P.O. Box 176 Cadiz, OH 43907 740-942-8220 C. A. Ebetino, Jr., pres.	Nelms Prep Plant (30)	Green	Hn-169[1]	D-0424	prep plant—heavy-media vessel, heavy-media cyclones, spirals, dryers, thickeners, crushers, screens
	Cravat Coal Co. 40580 Cadiz-Piedmont Rd. Cadiz, OH 43907 740-942-4656 Michael Puskarich, pres.	22 Shop	Moorefield	Hn-230		shop
	Harrison Mining Corp. 86395 Mine Rd. P.O. Box 250 Hopedale, OH 43976 740-937-2615 Mark McIntire, v. pres.	Nelms Prep Plant (30)	Green	Hn-169[1]	D-0424	prep plant—heavy-media vessel, heavy-media cyclones, spirals, dryers, thickeners, crushers, screens
Jackson	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Bowman Strip (10)	Jefferson, Madison	Jkn-367	D-0285	prep plant—jig, crushers, breaker, screens, dryers, wash tables
Lawrence	Collins Mining Co. 981 State Route 650 Ironton, OH 45638-8600 740-534-9445 C. E. Collins, v. pres.	River Dock	Hamilton	Le-415	D-0777	dock
Mahoning	Thompson Bros. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 330-549-3979 J. E. Thompson, owner	Thompson Bros. Mining Co.	Springfield	Mg-588	D-0711	tipple

[1]This prep plant was operated January through October 2001 by Harrison Processing Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.

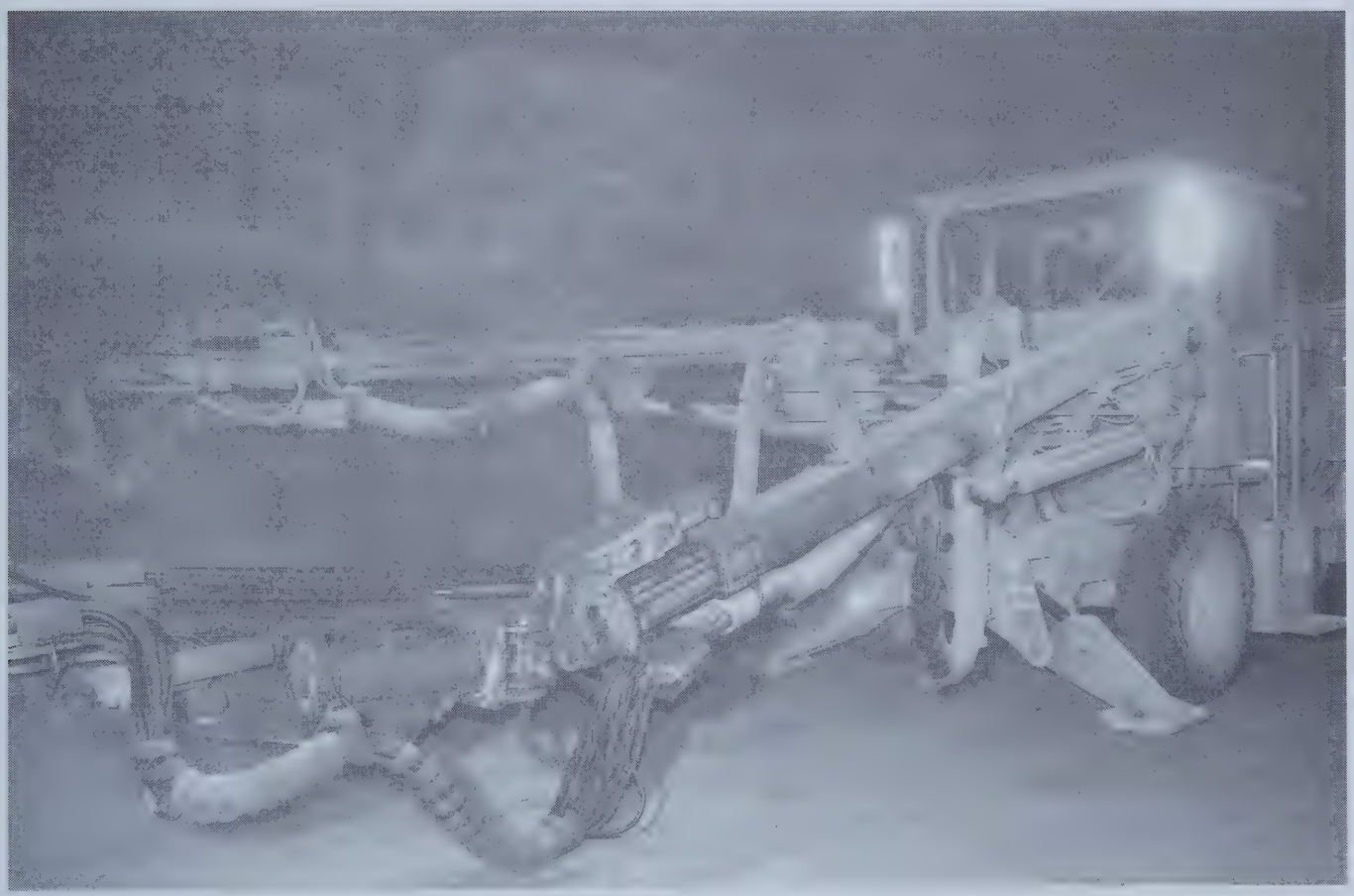
2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND ASSOCIATED FACILITIES, BY COUNTY (cont.)

County	Name, address, telephone number, and president/owner/ manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Mining and reclamation permit number	Type of facility
Meigs	CONSOL Energy, Inc. 1800 Washington Rd. Pittsburgh, PA 15421-1421 412-831-4000 Barry D. Dangerfield, v. pres.	Meigs Mine No. 31 (14)	Salem	Ms-293[2]	D-0354	prep plant—heavy-media washers, flotation, cyclones, centrifuges, thickeners, filters, breaker, screens
	Southern Ohio Coal Co. P.O. Box 490 Athens, OH 45701 740-286-5051 Charles A. Ebetino, gen. mgr.	Meigs Mine No. 31 (14)	Salem	Ms-293[2]	D-0354	prep plant—heavy-media washers, flotation, cyclones, centrifuges, thickeners, filters, breaker, screens
	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Waterloo Dock #3	Salisbury	Ms-285	D-0698	tipple, dock
Morgan	Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732 740-454-1121 Gary Dimmerling, gen. mgr.	Muskingum Mine (16)	Meigsville	Ne-41[3]	D-0378, D-0420	tipple, prep plant—jigs, flotation, cyclones, thickener, filters, crushers, breakers, screens, magnets
	CONSOL Energy, Inc. 1800 Washington Rd. Pittsburgh, PA 15421-1421 412-831-4000 Barry D. Dangerfield, v. pres.	Muskingum Mine (16)	Meigsville	Ne-41[3]	D-0378, D-0420	tipple, prep plant—jigs, flotation, cyclones, thickener, filters, crushers, breakers, screens, magnets
Perry	Crooksville Coal Co., Inc. P.O. Box 149 Crooksville, OH 43731 740-982-6651 Ralph L. Allen, pres.	Crooksville Tipple	Salt Creek	Py-339	D-0692	tipple
Scioto	Norfolk Southern Railroad 914 Hayport Rd. Wheelersburg, OH 45694 740-574-8491 Charles G. Howard, asst. to mgr.	NS Wheelersburg Terminal	Porter	So-96		dock
Tuscarawas	Central Fuel Co. County Rd. 55 P.O. Box 165 New Philadelphia, OH 44663 330-339-5049 Keith B. Kimble, gen. mgr.	Central Fuel Co. (20)	York	Ts-1938	D-0264	prep plant—jig, screen, dryers
	Copperhead Mining P.O. Box 525 Sugarcreek, OH 44681-0525 330-852-4511 Edward Gauss, pres.	Barrs Mills Tipple	Sugar Creek	Ts-MM1	D-0876	tipple
	Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 330-893-2721 Merle Mullet, pres.	Strasburg Wash Plant (21)	Franklin, Lawrence	Ts-1942	D-0287	prep plant— jigs, cyclones, centrifuges, crushers, screens, picking tables
		Slurry Wash Plant (32)	Franklin, Lawrence	Ts-HC	D-0981	prep plant—cyclones

[2]This prep plant was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.
[3]This prep plant was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

2001 OHIO DIRECTORY OF COAL-PREPARATION PLANTS AND ASSOCIATED FACILITIES, BY COUNTY (cont.)

County	Name, address, telephone number, and president/owner/ manager of company	Name of plant (and map location number for coal-preparation plants)	Township	State mine number	Mining and reclamation permit number	Type of facility
Vinton	Sands Hill Coal Co., Inc. P.O. Box 650 Hamden, OH 45634-0650 740-384-4211 Alan C. Arthur, pres.	Sands Hill Tipple/ Preparation Plant (24)	Clinton	Vn-641	D-0169, D-0309	tipple, prep plant—heavy-media washers, flotation, cyclones, centrifuge, crushers, screens, dryer, picking tables, magnets
	Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Benedict Tipple Dundas Tipple	Swan Clinton	Vn-145 Vn-178	D-0159 D-0185	tipple tipple



A Cannon twin-boom jumbo drill is operated by John Bergles at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The drill is capable of drilling 56 holes, 16 feet deep, in 1 hour and 10 minutes. Horizontal and vertical angles of the drill holes can be varied to facilitate blasting. Water from an attached tank is used to remove the drill cuttings and to control dust.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY

NOTE: This directory lists only the coal-producing operations. It does not list tipples, loading docks, preparation plants, or other active, nonproducing operations that would contribute to employment and wage statistics presented in tables 11-17. For those mines that have not been assigned a state mine number, a letter designation is used (example: Bt-C). There is no correlation between the "Seam Number" column and the "Production Tonnage" column. The Seam Number column represents the seams mined at the operation. No production tonnage is listed by seam. Days in production were estimated for those companies not providing this information. To convert short tons to metric tons, multiply the given tonnage by 0.907185.

SEAM IDENTIFICATION OF PRINCIPAL OHIO COALS

1	Sharon	4	Brookville	6A	Lower Freeport	9	Meigs Creek
2	Quakertown	4A	Clarion	7	Upper Freeport	11	Waynesburg
3	Lower Mercer	5	Lower Kittanning	7A	Mahoning	12	Washington
3A	Upper Mercer	5A	Strasburg	8	Pittsburgh	H	Harlem
3B	Tionesta	6	Middle Kittanning	8A	Pomeroy-Redstone	W	Winters

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 2001	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Production: Underground	Production: Surface	Non-production	
ATHENS COUNTY—Total production = 1,248,192														
Buckingham Coal Co., Inc.	Buckingham Mine No. 2	Trimble	6	84	drift	cont. miner	1,248,192	255	rail	1,241,897		42	23	As-B
BELMONT COUNTY—Total production = 7,629,057														
American Energy Corp.	Century Mine	Wayne[1]	8	63	drift	cont. miner	481,219	212	water	468,346		105	29	Bt-67
Bennoc, Inc.	Bennoc, Inc.	Wayne	11	32	surface	strip	27,845	72	truck	27,845		7	12	Bt-BE
Cravat Coal Co.	Hendrysburg	Kirkwood	8	36	surface	strip	254,312	247	truck	36,604		14	4	Bt-C2
			9	42		auger	30,540		water	248,478				
						Total	*284,852*		*Total*	*285,082*				
	Johnen	Wheeling	9	42	surface	strip	192,502	212	truck	17,234		11	2	Bt-C3
						auger	133,866		water	308,759				
						Total	*326,368*		*Total*	*325,993*				
Marietta Coal Co.	St. Joe	Pultney	9	34	surface	strip	24,980		truck	43,119				Bt-MC
						auger	18,140							
						Total	*43,120*							
	Cochran/SWAD	Colerain, Pease	11		surface	strip	74,017		truck	86,801				Bt-P
						auger	12,784							
						Total	*86,801*							
	Fairpoint	Wheeling	9		surface	strip	26,419		truck	31,502				Bt-M10
			11			auger	5,083							
						Total	*31,502*							
	Hostetler-Hapapuro	Colerain	9		surface	strip	106,138		truck	112,298				Bt-1171
			11			auger	6,655							
						Total	*112,793*							

	Johnson-Wozniak	Richland	9		surface	strip	32,719		truck	53,627			Bt-M4
			11			auger	20,908						
						Total	*53,627*						
	Krulock-Hannan	Colerain	9	40	surface	strip	27,619		truck	31,046			Bt-MC1
						auger	3,427						
						Total	*31,046*						
	Mauersberger	Union	9	48	surface	strip	44,542		truck	46,224			Bt-M9
						auger	1,682						
						Total	*46,224*						
	McGraw	Richland, Wheeling	11		surface	strip	102,608		truck	157,182			Bt-M7
						auger	54,574						
						Total	*157,182*						
	Refuse Site	Pease	9		surface	strip	499		truck	499			Bt-1150
	Senakiewich	Wheeling	9		surface	strip	9,223	210	truck	17,008	58	36	Bt-M8[2]
						auger	7,785						
						Total	*17,008*						
Ohio River Collieries, Inc.	7400 Sulek	Union	9		surface	strip	2,611	7	water	3,093	1	1	Bt-1074
Ohio Valley Coal Co.	Powhatan No. 6	Smith[1]	8	62	drift	longwall	4,122,158	358	rail	2,675,646	199	227	Bt-68
						cont. miner	489,129		truck	1,942,483			
						Total	*4,611,287*		*Total*	*4,618,129*			
Oxford Mining Co., Inc.	Boswell	Warren	8	45	surface	strip	319,867	151	truck	364,265	16	1	Bt-OX
			9	40		auger	44,398						
						Total	*364,265*						
	Egypt Valley East	Warren	9	40	surface	strip	22,902	30	truck	22,902	2	1	Bt-OX1
	Jeffco	Warren	9	40	surface	strip	187,277	180	truck	207,729	14	2	Bt-1186
						auger	20,452						
						Total	*207,729*						
	Martin	Wheeling	8	61	surface	strip	52,110	91	truck	59,674		1	Hn-O[3]
						auger	7,564						
						Total	*59,674*						
	Oxford Mining Co., Inc.	Warren	8	45	surface	strip	255,985	83	truck	274,796	10	1	Bt-OX2
			9	40		auger	18,811						
						Total	*274,796*						
Sidwell Materials, Inc.	Bellaire Stone	Pultney	8		surface	strip	19,073	107	truck	19,073	2	2	Bt-1190
			9										
	Uniontown	Wheeling	8	56	surface	strip	8,115	40	truck	8,115	1	1	Bt-B
Valley Mining, Inc.	Egypt Valley	Kirkwood, Warren	8		surface	strip	333,419	249	truck	358,519	25	2	Bt-VM
			9			auger	25,100						
						Total	*358,519*						

[1]Mining is in this township; mine portal is in township shown on map.
[2]Employment includes all of Marietta Coal Co. operations in Belmont County.
[3]See also Harrison County.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 2001	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Production: Underground	Production: Surface	Non-production	
CARROLL COUNTY—Total production = 114,263														
Buckeye Industrial Mining Co.	Starkey	Fox	7A	27	surface	strip	39,902	101	truck	39,902		4	1	Cl-B2
Myers Mining	Harlem #7	Lee, Perry	H	18	surface	strip	36,341	307	truck	36,341		4	4	Cl-M2
Sterling Mining Co.	Carrol Hollow	Fox	7A	36	surface	strip	22,585	251	truck	38,020		4	1	Cl-S
						auger	15,435							
						Total	*38,020*							
COLUMBIANA COUNTY—Total production = 215,778														
Buckeye Industrial Mining Co.	Mountain Spring #11	Madison	7A	36	drift	cont. miner	1,900	20	truck	1,900			1	Ca-1003
	Ingledue	Center	7A	24	surface	strip	135,969	346	truck	161,260		8	1	Ca-B1
						auger	25,291							
						Total	*161,260*							
C & E Coal, Inc.	Dailey Pit	Elkrun	7	34	surface	strip	25,848	207	truck	28,764		2	1	Ca-CE2
						auger	2,916							
						Total	*28,764*							
D. & D. Mining Co.	D. & D. Strip	Unity	5		surface	strip	423	3	truck	423		1	5	Ca-348
State Line Resources, Inc.	Grimm Mine	Middleton	7		surface	strip	9,372	240	truck	9,372			3	Ca-S1
	State Line Resources, Inc.	Middleton	5	8	surface	strip	14,059	120	truck	14,059		2	5	Ca-505
			6	22										
COSHOCTON COUNTY—Total production = 63,816														
Holmes Limestone Co.	Miley-Patterson	Mill Creek	6		surface	strip	49,163	248	truck	49,163		1	1	Cn-HL1
	Plainfield	Linton	6		surface	strip	14,653	85	truck	14,653			2	Cn-H2
GALLIA COUNTY—Total production = 221,057														
Sands Hill Coal Co., Inc.	Coal Valley	Huntington	6	72	surface	strip	54,653		truck	10,897				Ga-SH
									water	1,468				
									conveyor	42,288				
									Total	*54,653*				
	Coal Valley	Huntington	6	72	surface	strip	166,404	281	truck	33,177		13	2	Ga-629[4]
			7	12					water	4,471				
									conveyor	128,756				
									Total	*166,404*				
GUERNSEY COUNTY—Total production = 8,327														
Valley Mining, Inc.	Snyder-Bush	Wheeling	6	30	surface	strip	4,445	91	truck	8,327		1	1	Gy-318
						auger	3,882							
						Total	*8,327*							

HARRISON COUNTY—Total production = 3,544,834														
AEP Ohio Coal, L.L.C.	Nelms Mine-Cadiz Portal	Green	6A	60	drift	cont. miner	271,604	55	rail	196,611		27	7	Hn-710[5]
									water	30,124				
									other	170				
									Total	*226,905*				
CONSOL Energy, Inc.	Dozer Pit	Athens	8		surface	strip	95,726	90	truck	95,726		10	2	Hn-CON
	Mahoning Valley Mine 937	Athens	9	42	surface	strip	377,299	143	truck	232,050		48	6	Hn-700
Cravat Coal Co.	Poplar Ridge	Moorefield	8A	40	surface	strip	2,512	8	water	2,512			1	Hn-C4
Daron Coal Co., Inc.	Standingstone Mine	Cadiz	8	50	surface	strip	355,722	307	rail	1,774		11	7	Hn-D
			8A	18		auger	73,822		truck	426,145				
			9	36		*Total*	*429,544*		*Total*	*427,919*				
Harrison Mining Corp.	Nelms Mine-Cadiz Portal	Green	6A	60	drift	cont. miner	1,791,010	298	rail	1,296,426	127		35	Hn-710[5]
									water	198,630				
									other	1,117				
									Total	*1,496,173*				
Oxford Mining Co., Inc.	Martin	Athens	8	61	surface	strip	52,110	91	truck	59,674			4	Hn-O[6]
						auger	7,564							
						Total	*59,674*							
	McConnell	Athens	9	45	surface	strip	384,410	264	truck	386,082		22	2	Hn-OX
						auger	1,672							
						Total	*386,082*							
Schaney Mining	Melvin Schaney	Green	8		surface	strip	3,802	78	truck	3,802		1	3	Hn-SM
	Melvin Schaney	Green	8		surface	strip	7,159	58	truck	7,159		2	6	Hn-SC
Schiappa Coal Co., Inc.	Cherry Valley	Green	8	56	surface	strip	120,422	301	truck	120,422		13	5	Hn-767
			8A	20										
HOLMES COUNTY—Total production = 141,190														
Holmes Limestone Co.	Walnut Creek	Walnut Creek	6		surface	strip	141,190	236	truck	141,190		9	1	Hs-H1
JACKSON COUNTY—Total production = 1,305,575														
Sands Hill Coal Co., Inc.	Lincoln	Milton	5	36	surface	strip	22,245		truck	4,435				Jkn-S3
			6	18					water	598				
									conveyor	17,212				
									Total	*22,245*				
	Pearce	Milton	4A	48	surface	strip	138,739		truck	27,661				Jkn-S4
			5	36					water	3,728				
			6	16					conveyor	107,350				
			7	12					*Total*	*138,739*				

[4]Employment reported for Ga-629 includes Ga-SH.
[5]This mine was operated January through October 2001 by Harrison Mining Corp. and November and December 2001 by AEP Ohio Coal, L.L.C.
[6]See also Belmont County.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 2001	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Production: Underground	Production: Surface	Non-production	
JACKSON COUNTY (continued)														
Sands Hill Coal Co., Inc. (cont.)	Sands Hill Rockcamp II	Milton	4A	36	surface	strip	269,987	281	truck	53,829		29	30	Jkn-S2[7,8]
				5	19					water	7,254			
			6	12					conveyor	208,904				
			7	48					*Total*	*269,987*				
Waterloo Coal Co., Inc.	Bowman Strip	Madison	4A	14	surface	strip	874,604	288	truck	874,604		63	46	Jkn-367
			5	40										
			6	48										
JEFFERSON COUNTY—Total production = 912,273														
Anthony Mining Co., Inc.	Lions Club	Smithfield	8	56	surface	strip	130,083	301	truck	140,081		13	4	Jfn-AN
			8A	20		auger	9,998							
			9	30		*Total*	*140,081*							
Buckeye Industrial Mining Co.	Snyder Deep Mine #10	Ross	7	36	drift	cont. miner	141,906	240	truck	141,906		10	2	Jfn-BI
Cravat Coal Co.	Prokes	Wells	8	54	surface	strip	27,702	54	water	34,367		3	1	Jfn-C
						auger	6,665							
						Total	*34,367*							
F. & M. Coal Co.	F. & M. Strip	Wayne	8	54	surface	strip	23,756	308	truck	23,756			3	Jfn-FM
K.C.C.I.	Apex	Springfield	8	48	surface	strip	5,174	80	truck	5,174			1	Jfn-K
Sterling Mining Co.	Sterling South	Brush Creek	7A	36	drift	cont. miner	233,872	251	truck	233,872		21	6	Jfn-ST
	Sterling North	Brush Creek	7A	36	drift	cont. miner	193,512	251	truck	193,512		14	1	Jfn-823
Valley Mining, Inc.	Hamilton	Smithfield	8		surface	strip	78,968	179	truck	81,322		7	1	Jfn-V1
			8A			auger	2,354							
						Total	*81,322*							
	Piergallini	Smithfield	8		surface	strip	53,629	254	truck	53,899		6	1	Jfn-831
			9			auger	270							
						Total	*53,899*							
Varkony Mining Co.	JWP	Ross	8	54	surface	strip	4,384	28	truck	4,384		1	1	Jfn-V2
MAHONING COUNTY—Total production = 16,875														
ESSROC Cement Corp.	Bessemer Pit	Poland	5	24	surface	strip	3,569	250	truck	3,569			2	Mg-608
East Fairfield Coal Co.	Withers-Petersburg	Springfield	4	22	surface	strip	3,219	251	truck	3,219			1	Mg-E
Thompson Bros. Mining Co.	North Lima Mine	Beaver	4		surface	strip	10,087	53	truck	10,087			2	Mg-T

MEIGS COUNTY—Total production = 4,291,350													
CONSOL Energy, Inc.	Meigs Mine #2	Columbia	4A	54	drift	longwall	1,049,497	136	conveyor	1,089,708	50	23	Ms-294[9]
						cont. miner	60,927						
						Total	*1,110,424*						
	Meigs Mine #31	Salem	4A	54	drift	longwall	696,112	80	conveyor	748,057	43	61	Ms-293[9]
						cont. miner	51,945						
						Total	*748,057*						
Southern Ohio Coal Co.	Meigs Mine #2	Columbia	4A	52	drift	longwall	1,271,531	146	conveyor	1,320,249	90	46	Ms-294[9]
						cont. miner	73,817						
						Total	*1,345,348*						
	Meigs Mine #31	Salem	4A	54	drift	longwall	1,012,006	116	conveyor	1,087,521	90	112	Ms-293[9]
						cont. miner	75,515						
						Total	*1,087,521*						
MORGAN COUNTY—Total production = 537,469													
CONSOL Energy, Inc.	Muskingum Mine	Meigsville	9	42	surface	strip	407,177	113	conveyor	410,825	17	24	Ne-41[10,11]
						auger	3,648						
						Total	*410,825*						
Central Ohio Coal Co.	Muskingum Mine	Meigsville	9	42	surface	strip	125,504	42	conveyor	126,644	20	38	Ne-41[10,11]
						auger	1,140						
						Total	*126,644*						
MUSKINGUM COUNTY—Total production = 701,248													
Oxford Mining Co., Inc.	Adamsville	Madison	6	36	surface	strip	104,818	80	truck	115,961		18	Mum-OX1
						auger	11,143						
						Total	*115,961*						
	Adamsville East	Madison, Salem	6	36	surface	strip	34,624	22	truck	34,899		3	Mum-OX2
						auger	275						
						Total	*34,899*						
	Camp	Washington	6	36	surface	strip	508,460	223	truck	550,388	38	3	Mum-OX
			6A	44		auger	41,928						
						Total	*550,388*						
NOBLE COUNTY—Total production = 578,262													
B & N Coal, Inc.	Barnes Ridge	Marion	9	36	surface	strip	257,926	253	truck	257,926	12	1	Ne-BN2
	Estadt	Stock	9	30	surface	strip	16,904	56	truck	16,904	1	1	Ne-BN
	Friday	Marion	9	36	surface	strip	36,163	96	truck	36,163	3	1	Ne-BN3
	Lee	Elk	9	30	surface	strip	35,819	126	truck	35,819		2	Ne-155
	Ullman	Elk	9	30	surface	strip	104,291	252	truck	104,291	5	1	Ne-151

[7]Employment reported for Jkn-S2 is a summary for all Sands Hill Coal Co., Inc. operations in Jackson County.
[8]See also Vinton County.
[9]This mine was operated January through June 2001 by Southern Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.
[10]See also Noble County.
[11]This mine was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 2001	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Production: Underground	Production: Surface	Non-production	
NOBLE COUNTY (continued)														
CONSOL Energy, Inc.	Muskingum Mine	Sharon	9	42	surface	strip	96,321	113	truck	97,198		6	10	Ne-41[12,13]
						auger	877							
						Total	*97,198*							
Central Ohio Coal Co.	Muskingum Mine	Sharon	9	42	surface	strip	29,692	42	conveyor	29,961		2	2	Ne-41[12,13]
						auger	269							
						Total	*29,961*							
PERRY COUNTY—Total production = 1,052,138														
Oxford Mining Co., Inc.	Z-Mack	Clayton, Pike	5	42	surface	strip	1,052,138	264	rail	314,894		47	8	Py-O
			6	52					truck	737,244				
									Total	*1,052,138*				
STARK COUNTY—Total production = 696,906														
Buckeye Industrial Mining Co.	Henning	Paris	6	26	surface	strip	702	6	truck	702			1	Sk-B6
	Anthony	Osnaburg	5	2	surface	strip	28,074	72	truck	28,074		5	1	Sk-B2
			6	25										
	Baird	Paris	5	24	surface	strip	107,624	217	truck	107,624		9	1	Sk-B5
			6	28										
	Close	Pike	4	24	surface	strip	8,325	35	truck	8,325		1	1	Sk-B
	Finnie	Paris	6	28	surface	strip	89,210	245	truck	89,210		4	1	Sk-B3
			6A	24										
ENZ, Inc.	Sickafoose Pit	Sandy	4	22	surface	strip	266,134	307	truck	266,134		18	9	Sk-208
Holmes Limestone Co.	E. Canton-Thomas	Osnaburg	6		surface	strip	139,432	276	truck	139,432		8	1	Sk-H1
	Bolivar	Bethlehem	6		surface	strip	57,405	240	truck	57,405		3	1	Sk-235
TUSCARAWAS COUNTY—Total production = 784,425														
Belden Brick Co.	Belden Pit	Sugar Creek	4	6	surface	strip	2,121	20	truck	2,121			1	Ts-1646
	Moomaw Pit	Sugar Creek	3B	12	surface	strip	16,096	19	truck	16,096			4	Ts-1517
			4	30										
	Wallick Pit	Franklin, Wayne	4	21	surface	strip	18,900	50	truck	18,900			2	Ts-1841
Blue Jay Enterprises of Ts. Co., Inc.	Blue Jay #1	Sandy	4	18	surface	strip	1,769	15	truck	1,769		1	1	Ts-BJ
Franklin Mineral	Franklin Mineral Kohl Pit 1	Lawrence	5	20	surface	strip	7,604	25	truck	7,604			1	Ts-F
			5A	18										
Holmes Limestone Co.	Dennison-R & F	Rush	6A		surface	strip	56,339	260	truck	96,547		4	1	Ts-2043
						auger	40,208							
						Total	*96,547*							

	Stone Creek-Costain	York		6	surface	strip	137,582	276	truck	161,392	9	1	Ts-H5
						auger	23,810						
						Total	*161,392*						
	Stone Creek-Spring	York		6	surface	strip	1,302	10	truck	1,302		1	Ts-H4
Kimble Clay & Limestone Co.	Kimble Clay & Limestone	York	6	28	surface	strip	4,405	13	truck	6,179		1	Ts-2019
			7	30		auger	1,774						
						Total	*6,179*						
	Kimble Clay & Limestone	York	5	28	surface	strip	204,677	241	truck	214,356	10	1	Ts-K7
			6	28		auger	9,679						
						Total	*214,356*						
	Kimble Clay & Limestone	Dover	5	28	surface	strip	73,958	202	truck	89,165		5	Ts-K6
			5A	10		auger	15,207						
			6	28		*Total*	*89,165*						
	Kimble Clay & Limestone	Salem	5		surface	strip	11,749	33	truck	16,854		2	Ts-M[14]
			6			auger	5,105						
						Total	*16,854*						
	Kimble Clay & Limestone	Washington	7	30	surface	strip	674	12	truck	1,823		1	Ts-K5
						auger	1,149						
						Total	*1,823*						
	Kimble Clay & Limestone	Sugar Creek	3A	22	surface	strip	1,377	4	truck	1,377		1	Ts-K4
			4	14									
	Kimble Clay & Kimestone	Washington	6	28	surface	strip	37,762	225	truck	54,089		3	Ts-H6
			6A	33		auger	16,327						
						Total	*54,089*						
	Kimble Clay & Limestone	Dover	4	14	surface	strip	33,265	82	truck	33,265		3	Ts-1727
			5	28									
			6	28									
L & M Mineral Co.	Luikart	Mill, Warwick	6		surface	strip	9,382	19	truck	9,382	1	1	Ts-1914
Marietta Coal Co.	Linden Valley	Salem	6		surface	strip	14,846		truck	14,846			Ts-M[14]
Valley Mining, Inc.	Braver	Union	7		surface	strip	25,959	232	truck	37,358	4	1	Ts-V2
						auger	11,399						
						Total	*37,358*						
VINTON COUNTY—Total production = 1,628,756													
Sands Hill Coal Co., Inc.	Big Valley	Wilkesville, Vinton	4A	48	surface	strip	31,354		truck	6,251			Vn-S4
			5	36					water	842			
				12					conveyor	24,261			
									Total	*31,354*			
	Elk	Elk	4	41	surface	strip	69,186	281	truck	13,794		17	Vn-S2[15]
				36					water	1,859			
			4A	28					conveyor	53,533			
									Total	*69,186*			

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[12]See also Morgan County.
[13]This mine was operated January through June 2001 by Central Ohio Coal Co. and July through December 2001 by CONSOL Energy, Inc.
[14]This mine was operated January through May 2001 by Marietta Coal Co. and June through December 2001 by Kimble Clay & Limesone Co.
[15]Employment reported for Vn-S2 includes Vn-S3 and Vn-S4.

2001 OHIO DIRECTORY OF PRODUCING COAL-MINE OPERATORS, BY COUNTY (cont.)

Name of company	Name of mine	Township	Seam		Type of mine	Production		Days in production in 2001	Disposition		Employment			State mine number
			Number	Thickness (inches)		Method	Tonnage		Method	Tonnage	Production: Underground	Production: Surface	Non-production	
VINTON COUNTY (continued)														
Sands Hill Coal Co., Inc. (cont.)	Elk	Elk	4	41	surface	strip	241,113		truck	48,073				Vn-S3
			36						water	6,478				
			4A	28					conveyor	186,562				
									Total	*241,113*				
	Sands Hill Rockcamp II	Wilkesville	4A	48	surface	strip	269,987	280	truck	53,830		27	31	Jkn-S2[16]
			5	36					water	7,254				
			6	19					conveyor	208,903				
			7	12					*Total*	*269,987*				
Waterloo Coal Co., Inc.	Allied Pit	Elk	4,	18	surface	strip	143,806	119	truck	143,806		8	3	Vn-184[17]
			4A	32										
			5	24										
			6	18										
	Dundas Pit	Clinton	4	50	surface	strip	836,721	287	truck	836,721		56	40	Vn-191
			4A	36										
			5	45										
			6	20										
			7	18										
	Mitchell Hollow Pit	Swan	4A	17	surface	strip	36,589		truck	36,589				Vn-172
WASHINGTON COUNTY—Total production = 98,752														
B & N Coal, Inc.	Shilling	Aurelius	9	30	surface	strip	98,752	253	truck	98,752		8	1	Ne-1008

[16]See also Jackson County.
[17]Employment reported for Vn-184 includes Vn-172.

The aggregate processing plant at the East Fairfield Coal Co. limestone mine in Mahoning County. The beltlines carry product from the primary crusher to the wet screen and the oversize (>2 1/2 inches) is carried back for recrushing.

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Ts-A).
If there are no sales or production figures given for an operation, that operation reported no sales or production in 2001.
To convert short tons to metric tons, multiply the given tonnage by 0.907185.

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
ATS Enterprises P.O. Box 13070 Lexington, KY 40583 859-299-7001 Steve Lawson, plant mgr.	ATS Enterprises (306)	Scioto	sand & gravel	335,995	343,140	So-79	IM-221
Acme Sand & Gravel 128 First St. W Strasburg, OH 44680 330-878-7205 Susan Malcuit, pres.	Acme Sand & Gravel (612)	Tuscarawas	sand & gravel			Ts-A	IM-1218
Agg Rok Materials 711 Frank Rd. Columbus, OH 43223 614-875-5500 William G. Heffner, pres.	Agg Rok (94)	Franklin	sand & gravel	914,571	901,215	Fn-36	IM-302
Alan Stone Co., Inc. P.O. Box 127 Chesterhill, OH 43728 740-554-6191 Claudia Staley, pres.	Alan Stone Co., Inc. (51) Marietta Quarry (43)	Belmont Washington	sandstone sandstone			Bt-1193 Wn-45	IM-1117 IM-125
William Albert, Inc. 1300 Cassingham Hollow Rd. Coshocton, OH 43812 740-622-3045 William Albert, pres.	William Albert, Inc. (438) William Albert, Inc. (723)	Coshocton Coshocton	sand & gravel clay sand & gravel	317 39,590	317 41,600	Cn-828 Cn-WA	IM-1026 IM-2036
Alden Sand & Gravel Co. 2504 Northampton Rd. Cuyahoga Falls, OH 44223 330-928-3249 Connie Ensign, pres.	Alden Excavating (496)	Summit	sand & gravel	20,563	20,563	St-55	IM-589
Allgeier & Son, Inc. 6386 Bridgetown Rd. Cincinnati, OH 45248 513-574-3735 Michael E. Allgeier, pres.	Allgeier & Son, Inc. Pit 1 (521) Allgeier & Son, Inc. Pit 2 (467) Allgeier & Son, Inc. (520)	Hamilton Hamilton Hamilton	sand & gravel sand & gravel sand & gravel	 100,000 120,000	 100,000 120,000	Hmn-AS1 Hmn-AS Hmn-C	IM-797 IM-1106 IM-1132
Allied Corp., Inc. 1749 Highland Dr. Twinsburg, OH 44087 330-425-7861 Mark Shelly, pres.	Allied Corp., Inc. (435)	Stark	sand & gravel			Sk-173	IM-879
American Excavating, Inc. P.O. Box 374 Enon, OH 45323 937-882-1372 Robert E. Holland, pres.	American Excavating, Inc. (704)	Clark	sand & gravel	2,645	31,000	Ck-A	IM-1359
American Landfill, Inc. 7916 Chapel St. SE Waynesburg, OH 44688 330-866-3265 David A. Bower, Jr., pres.	American Landfill, Inc. (123)	Stark	clay			Sk-246	IM-2024
American Sand & Gravel, Inc. 8188 Wales Rd. NW North Canton, OH 44720 330-762-9373 Christopher A. Scala, pres.	American Sand & Gravel, Inc. (710) Plant 1 (387) Plant 2 (386) Plant 4 (455)	Portage Portage Stark Stark	sand & gravel sand & gravel sand & gravel sand & gravel	 111,924 1,193,673	 111,924 1,193,673	Pe-A Pe-95 Sk-203 Sk-243	IM-1362 IM-212 IM-654 IM-908

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Apache Aggregate & Paving Co. 46626 County Route 495 Coshocton, OH 43812 740-622-5904 Charlene B. Ross, pres.	Apache Aggregate & Paving Co. (69) Apache Aggregate & Paving Co. (70)	Coshocton Coshocton	sand & gravel sand & gravel	119,923	135,429	Cn-718 Cn-783	IM-227 IM-717
Ashcraft Sand & Gravel, Inc. 5850 Dry Fork Rd. Cleves, OH 45002 513-367-2177 Otis Ashcraft, pres.	Ashcraft Sand & Gravel, Inc. (120)	Hamilton	sand & gravel	11,544	11,544	Hmn-54	IM-710
Athens Hocking Reclamation Center 450 Gallagher Ave. Logan, OH 43138 740-385-6019 Edward F. Kilbarger, pres.	Athens Hocking Reclamation Center (81)	Athens	clay	1,025	1,025	As-594	
Atlas Towing Co. P.O. Box 1632 Parkersburg, WV 26101 304-428-0341 Christopher V. Criss, pres.	Belpre Bank Run (432)	Washington	sand & gravel	14,022	14,022	Wn-54	IM-383
Ayers Limestone Quarry, Inc. 2000 Colerain Pike P.O. Box 67 Martins Ferry, OH 43935 740-633-2958 Thomas E. Ayers, pres.	Ayers Limestone Quarry, Inc. (12)	Belmont	limestone	87,334	87,334	Bt-716	IM-1
B & L Excavating 4711 CR 1-2 Swanton, OH 43558 419-825-1218 Boyd Rhodes, owner	B & L Pit (654) Nowak (725)	Fulton Fulton	sand & gravel sand & gravel			Ftn-BL1 Ftn-BL2	IM-1282 IM-2025
B & L Sand Co. 441 Iowa St. Ashland, KY 41101 606-325-8301 Janet R. Griffiths, pres.	B & L Sand Co. (167)	Lawrence	sand & gravel	2,459	2,459	Le-430	IM-844
B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727 740-783-3575 Carl Baker, Jr., pres.	B & N Coal, Inc. (179)	Noble	limestone			Ne-B	IM-897
BPB-Celotex P.O. Box 280 Port Clinton, OH 43452 419-734-3153 Charles H. Johnson, plant mgr.	American #2 (1)	Ottawa	gypsum		117,003	Oa-2	IM-344
Baisden Sand & Gravel 1812 Baker Rd. Springfield, OH 45504 937-390-6536 Brett Baisden, pres.	Baisden (718)	Clark	sand & gravel	138,008	160,008	Ck-B	IM-2026
Baker Sand, Inc. 7800 White Rd. Burbank, OH 44214 330-948-1448 John E. Baker, pres.	Baker Sand, Inc. (203)	Medina	sand & gravel	644,998	644,998	Ma-20	IM-448

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Ballentine Excavation Co. 7854 Cooley Rd. Ravenna, OH 44266 330-297-9739 Daniel H. Ballentine, owner	Ballentine Lake (689)	Portage	sand & gravel	31,895	31,895	Pe-BA	IM-1327
Barrett Paving Materials, Inc. 8401 Sylvania Ave. Sylvania, OH 43560 734-483-4775 John Krispin, aggregate mgr.	Sylvania Quarry (160) (225)	Lucas	limestone clay	658,193 852	596,641 852	Ls-12	IM-953
Barrett Paving Materials, Inc. Midwest South 7374 Main St. Cincinnati, OH 45244 513-271-6200 George Ausseil, pres.	Barrett Paving Materials-Perintown (59) Jones Deposit (315) Pence Pit (314) River Quarry (112) Schmidt Deposit (213) (742)	Clermont Shelby Shelby Shelby Shelby	sand & gravel sand & gravel sand & gravel limestone limestone sand & gravel	66,510 0 529,000 321,000	265,556 50,000 529,000 375,000	Ct-9 Shy-18 Shy-11 Shy-15 Shy-SC1	IM-526 IM-388 IM-743 IM-387 IM-2017
Barrett Paving Materials, Inc. Midwest Central P.O. Box 13591 Dayton, OH 45413-0591 937-279-3200 Gerald Bushelman, reg. mgr.	Barrett Paving Materials, Inc. (461) Barrett Paving Materials, Inc. (177) Gregory Stone Inc. (66) Barrett Paving Materials, Inc. (734)	Clark Miami Miami Montgomery	sand & gravel limestone limestone sand & gravel	584,660 283,421 93,259 170,555	614,476 243,629 93,259 173,692	Ck-28 Mi-BPM Mi-502 My-B	IM-1100 IM-1169 IM-414 IM-2044
Bartley & Bolin Excavating 1242 County Rd. 1475 Ashland, OH 44805-9277 419-289-1507 Mitchell W. Bolin, owner	Bartley & Bolin, Inc. Plant #2 (6) Simanton Rd. (509) Bartley & Bolin, Inc. (409)	Ashland Ashland Richland	sand & gravel sand & gravel sand & gravel	193,323 16,775	193,323 16,775	Ald-9 Ald-16 Rd-20	IM-745 IM-1120 IM-617
Baycliffs Corp. 15400 Pearl Rd. #201 Strongsville, OH 44136 440-238-1905 Carl Zipfel, pres.	Johnson Island Quarry (198)	Ottawa	limestone			Oa-BC	IM-1288
Bearcreek Clay Co. 11123 State Route 37 East New Lexington, OH 43764 740-342-5269 Tom L. Dennis, owner	Dutch Ridge Rd. (108) (108) Nelson/Common (205) (205)	Perry Perry 	clay shale clay shale	12,756 25,513 17,707 16,197	12,756 25,513 17,707 16,197	Py-338 Py-D1 	IM-1092 IM-1304
Beaver Excavating, Inc. P.O. Box 6059 Canton, OH 44706 330-478-2151 W. Mark Sterling, pres.	Stone Products (607) (162)	Stark	sand & gravel clay			Sk-BE	IM-1202
Beck Sand & Gravel, Inc. 2820 Webb Rd. Ravenna, OH 44266 330-626-3863 Rodney Wenrich, pres.	Beck Sand & Gravel, Inc. (256)	Portage	sand & gravel	189,992	189,992	Pe-50	IM-96
Paul D. Beery Trucking Co. 4770 Cincinnati-Zanesville Rd. Lancaster, OH 43130 740-653-5061 Paul D. Beery, pres.	Paul D. Beery Trucking Co. (401)	Fairfield	sand & gravel	6,572	0	Fd-14	IM-933
Belden Brick Co. P.O. Box 20910 Canton, OH 44701 330-852-2424 Robert F. Belden, pres.	Beagle Pit (60) Belden Pit (209) (78) (57) (57) Dundee (191) (177) (177)	Tuscarawas Tuscarawas Tuscarawas 	clay limestone sandstone clay shale limestone clay shale	 9,474 52,379 31,922 	 9,474 52,379 31,922 	Ts-1960 Ts-1646 Ts-BB 	IM-48 IM-44 IM-1221

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
	Moomaw Pit (187)	Tuscarawas	limestone	17,424	17,424	Ts-1517	IM-46
	(62)		sandstone				
	(56)		clay	63,966	63,966		
	(56)		shale	49,563	49,563		
	Plotner Pit (181)	Tuscarawas	limestone			Ts-B	IM-49
	(147)		clay				
	(147)		shale				
	Shanesville Pit (206)	Tuscarawas	limestone			Ts-1939	IM-47
	(59)		clay	38,272	38,272		
	(59)		shale	124,903	124,903		
	Wallick Pit (232)	Tuscarawas	limestone	14,163	14,163	Ts-1841	IM-45
	(71)		sandstone				
	(58)		clay	100,051	100,051		
	(58)		shale	750	750		
Belville Mining Co., Inc. P.O. Box 834 Ironton, OH 45638 740-643-2331 Thomas J. Belville, pres.	Belville Mining #1 (159)	Lawrence	limestone			Le-B	IM-1188
	(93)		clay				D-0746
Best Sand Corp. 11830 Ravenna Rd. Chardon, OH 44024 440-285-3132 Charles D. Fowler, pres.	Best Sand Corp. (17)	Geauga	sandstone	728,813	822,953	Gea-3	IM-89
	Best Sand Corp. (45)	Pike	sandstone	87,051	52,268	Pke-31	IM-835
	Best Sand Corp. (34)	Ross	sandstone			Rs-16	IM-172
Beverly Slag Co. P.O. Box 599 McConnelsville, OH 43756 740-962-5621 Carl L. Price, v. pres.	Devola Pit (364)	Washington	sand & gravel			Wn-55	IM-669
Big T Mining P.O. Box 121 Haverhill, OH 45636 740-532-3951 Brian Hughes, owner	Big T Pit (663)	Scioto	sand & gravel			So-BT	IM-1286
E. E. Blair Construction Co. P.O. Box 309 Wheelersburg, OH 45694-0309 740-574-6575 Edwin E. Blair, pres.	Cab Pit (303)	Scioto	sand & gravel			So-98	IM-474
Bihn Excavating, Inc. 233 N. Lallendorf Rd. Oregon, OH 43616 419-693-3301 Michael J. Bihn, pres.	Central Office Park (732)	Lucas	sand & gravel			Ls-BE	IM-2054
Black Top Contracting, Inc. P.O. Box 426 Nelsonville, OH 45764 740-423-5455 Tim Maiden, pres.	Black Top #1 (19)	Athens	sand & gravel			As-588	IM-630
	York Twp. Trustees (702)	Athens	sand & gravel			As-BT	IM-1350
Blue Jay Enterprises of Ts. Co., Inc. P.O. Box 641 Zoar, OH 44697 330-874-2048 Leland D. Ervin, pres.	Blue Jay #1 (200)	Tuscarawas	limestone			Ts-BJ	IM-1285
	(201)		clay	6,234	6,234		
	(201)		shale	5,821	5,821		
	Swonger Waltz Mine (207)	Tuscarawas	limestone			Ts-520	IM-214
	(85)		clay	12,621	12,621		
	(85)		shale	3,565	3,565		
Blue Stone Sand & Gravel, Inc. 14376 N. Cheshire St. P.O. Box 567 Burton, OH 44021 440-834-1367 David W. Ronyak, pres.	Blue Stone Pit #1 (673)	Portage	sand & gravel	128,171	24,000	Pe-B1	IM-1296
	Blue Stone Pit #2 (674)	Portage	sand & gravel			Pe-B2	IM-1305

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Bluffton Stone Co. P.O. Box 26 Bluffton, OH 45817-0026 419-358-6941 Brent C. Gerken, pres.	Bluffton Stone Co. (3)	Allen	limestone	351,473	429,790	An-1	IM-485
Bowerston Shale Co. 1329 Seven Hills Rd. NE Newark, OH 43055 740-763-3921 Mark Willard, pres.	Hanover (31) Frazeysburg (38) (38)	Licking Muskingum	shale clay shale	20,723 16,559	20,723 16,559	Lg-501 Mum-776	IM-257 IM-256
Bowerston Shale Co. 515 Main St. P.O. Box 199 Bowerston, OH 44695 740-269-2921 Mark Willard, pres.	Bowerston (11) Scott Farm (109)	Harrison Harrison	shale shale	30,512	30,512	Hn-152 Hn-B	IM-42 IM-1020
Gaston Bowling, Inc. P.O. Box 330 Oxford, OH 45056 513-523-8805 Gaston Bowling, pres.	Indian Creek Sand & Gravel (37)	Butler	sand & gravel			Br-40	IM-493
D. H. Bowman & Sons, Inc. 1201 Mill St. Bellville, OH 44813-1282 419-886-2711 Richard D. Bowman, pres.	D. H. Bowman & Sons, Inc. (287)	Richland	sand & gravel	52,969	68,100	Rd-4	IM-279, IM-1255
Boyas Excavating, Inc. 10055 Sweet Valley Dr. Cleveland, OH 44125-4247 216-524-3620 Michael Boyas, pres.	Boyas Excavating, Inc. (595) (13) (239)	Cuyahoga	sand & gravel sandstone clay	22,000 30,489	22,000 30,489	Cya-42	IM-686
Boyd Excavating 9553 County Rd. 28 Zanesfield, OH 43360 937-465-3290 Jeff Boyd, owner	Boyd Excavating (669)	Logan	sand & gravel	9,876	9,876	Lgn-B	IM-1309
Briar Hill Stone Co. P.O. Box 457 Glenmont, OH 44628 330-377-5100 F. L. Waller, pres.	Quarry #18 (8) Quarry #24 (7) Quarry #26 (4) Quarry #3 (5) Quarry #32 (6) Quarry #54 (46) Quarry #55 (44) Quarry #31 (19) Quarry #6 (23)	Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Coshocton Holmes Knox	sandstone sandstone sandstone sandstone sandstone sandstone sandstone sandstone sandstone	681 2,128 3,052 585 17,473 2,243	681 2,128 3,052 585 17,473 2,243	Cn-695 Cn-692 Cn-13 Cn-659 Cn-686 Cn-809 Cn-815 Hs-49 Kx-12	IM-402 IM-294 IM-397 IM-232 IM-504 IM-909 IM-939 IM-418 IM-445
Briggs Sand & Gravel, Inc. Route 4 Box 303 County Rd. 10 Marietta, OH 45750 740-373-3363 James A. Briggs, pres.	Briggs Sand & Gravel, Inc. (365)	Washington	sand & gravel	5,483	5,483	Wn-508	IM-57
Broadway Sand & Gravel, Inc. 2000 Sandridge Dr. Dayton, OH 45439 937-299-1166 George D. Jones, v. pres.	Broadway Sand & Gravel, Inc. (225)	Montgomery	sand & gravel			My-65	IM-594
Broshear Contractors, Inc. 2520 Millville-Ross Rd. Hamilton, OH 45013 513-863-3388 Gerald Broshear, pres.	Green Heron (716) Ross Twp. Gravel (31)	Butler Butler	sand & gravel sand & gravel	87,255	87,255	Br-B Br-48	IM-2029 IM-562

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Gary L. Brown 900 W. South Boundary St., Bldg. 10 Perrysburg, OH 43551 419-872-4202 Gary L. Brown	Gary L. Brown (682)	Lucas	sand & gravel			Ls-GB	IM-1323
Browning-Ferris Industries of Ohio, Inc. 530 North Camp Rd. Port Clinton, OH 43452 419-635-2367 David Vossmer, gen. mgr.	Ottawa County Landfill (198)	Ottawa	clay	153,177	153,177	Oa-BF	IM-1287
Oscar Brugmann Sand & Gravel, Inc. 3828 Dudley Rd. Mantua, OH 44255 330-274-8224 Roy Brugmann, pres.	Oscar Brugmann Sand & Gravel, Inc. (258) (70) Oscar Brugmann Sand & Gravel, Inc. (628)	Portage Portage	sand & gravel sandstone sand & gravel	509,030 35,639	552,000 36,200	Pe-9 Pe-OB	IM-119 IM-1241
Brush Wellman, Inc. 14710 W. Portage River South Rd. Elmore, OH 43416-9502 419-862-2745 John Cayton, Env. Engineer	Brush Wellman Clay Mine (136)	Ottawa	clay			Oa-19	IM-1153
Buckeye Excavating Development, Inc. P.O. Box 102 Orrville, OH 44667 330-682-0730 Steven R. Steiner, partner	Steven Steiner (535)	Wayne	sand & gravel	11,664	11,664	We-23	IM-1136
Buckeye Industrial Mining Co. P.O. Box 389 Lisbon, OH 44432 330-337-9511 John C. Grisham, pres.	Clay (192) (186) West Point (178) Baird (237) Cable Job (146) (146) Close (200) (200) Robertsville (189) (189)	Columbiana Columbiana Stark Stark Stark Stark 	limestone clay clay clay clay shale clay shale clay shale	 117,655 48,000 11,331 259 	 117,655 48,000 11,331 251 	Ca-BIM Ca-987 Sk-B4 Sk-247 Sk-B Sk-BI 	IM-1271 D-0928 D-2096 D-0929 D-1123 D-1043
James Bunnell, Inc. 5730 State Route 128 Cleves, OH 45002 513-353-1100 Jack Ernst, pres.	James Bunnell, Inc. (123) James Bunnell, Inc. (124)	Hamilton Hamilton	sand & gravel sand & gravel	495,237 525,487	495,237 525,487	Hmn-50 Hmn-59	IM-205, IM-1139 IM-812, IM-815
Burlington Sand & Gravel Co. P.O. Box 399 Chesapeake, OH 45619 740-894-5978 Vernon E. Collier, owner	Burlington Sand & Gravel Co. (170)	Lawrence	sand & gravel	1,224	1,224	Le-426	IM-856
The Terry Byrne Mining Co. 4775 Mill Run Rd. Lexington, OH 44904 419-886-4345 Terrance K. Byrne, owner	The Terry Byrne Mining Co. (699)	Richland	sand & gravel			Rd-TB	IM-1343
C & S Contractors, Inc. P.O. Box 498457 Cincinnati, OH 45249 513-530-9844 Raymond A. Conn, pres.	C & S Contractors, Inc. (356)	Warren	sand & gravel			Wan-47	IM-846

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
C.I.R., Inc. 2856 N. County Line Rd. Geneva, OH 44041-9604 440-352-2256 Louis W. Pirc, pres.	Harmon (625)	Lake	sand & gravel	1,471	1,471	Lke-CIR	IM-1243
Cargill Incorporated Cargill Salt Division P.O. Box 6920 Cleveland, OH 44101 216-651-7200 Dale Fehrenback, gen. mgr.	Cargill Salt Inc. (1) Cargill Incorporated (4)	Cuyahoga Summit	salt salt	1,971,904 290,229	2,162,160 287,246	Cya-30 St-9127	
Carlisle Equipment Group L.P. P.O. Box 308 Newport, KY 41072 859-441-7400 Jeff Fenton, pres.	Landmark Baptist Temple (227) (235)	Hamilton	limestone shale	12,000	12,000	Hmn-CE	IM-2113
Carmeuse Ohio Inc. 1967 W. CR 42 Bettsville, OH 44815 419-986-5200 Farley Wood, operations mgr.	Maple Grove Works (106)	Seneca	limestone	3,255,464	3,255,464	Sa-2	IM-352
Joe E. Carter 21399 State Line Rd. Lawrenceburg, IN 47025 812-537-3970 Joe E. Carter, owner	Lost Bridge (642)	Hamilton	sand & gravel	500	500	Hmn-JC	IM-1267
Carter & Carter, Inc. P.O. Box 266 Miamisburg, OH 45343-0266 937-859-1036 Charles V. Carter, pres.	Carter & Carter, Inc.(561) (157)	Montgomery	sand & gravel clay	4,816	6,000	My-CW	IM-878
Cashen, Inc. 1225 Dock Rd. Madison, OH 44057 440-428-1148 Andrew Cashen, owner	Cashen, Inc. (597)	Lake	sand & gravel			Lke-C	IM-1215
Cedar Heights Clay Co. P.O. Box 295 Oak Hill, OH 45656-0295 740-682-7794 William T. Brown, pres.	Harrison (195) Phillips (230)	Jackson Jackson	clay clay	44,989	44,989	Jkn-CH2 Jkn-CH3	IM-1302 IM-2035
Central-Allied Enterprises, Inc. P.O. Box 80449 Canton, OH 44708-0449 330-477-6751 Gerald S. Orn, pres.	Canton Aggregate Div. (318) Canton Aggregate Div .(319) Central Aggregate Div. (631) Massillon Washed Gravel Div. (325) Massillon Washed Gravel Div. (578)	Stark Stark Stark Stark Stark	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel	760,947 199,219 4,500 311,484	760,947 199,219 4,500 311,484	Sk-681 Sk-689 Sk-CA Sk-607 Sk-MW	IM-164 IM-173 IM-1234 IM-102 IM-1171
Central Alloy Processing 275A Masonic Park Rd. Marietta, OH 45750 740-525-0381 R. Grant Elliot, pres.	Fletcher (84)	Knox	sandstone			Kx-C	IM-2128
Central Ohio Coal Co. P.O. Box 98 Cumberland, OH 43732-0098 740-962-2013 Gary Dimmerling, gen. mgr.	Horse Run Stone Quarry (73) Central Ohio Coal Company (230)	Morgan Noble	limestone limestone			Mon-600 Ne-C1	D-1034 IM-2134
Center West Enterprise, Inc. 1544 N. Main St. Niles, OH 44446 330-544-0890 Andrew Basil Polivka, pres.	Center West Enterprise, Inc. (611)	Trumbull	sand & gravel			Tl-C	IM-1190

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Cherokee Run Landfill 2946 U.S. Route 68 North Bellefontaine, OH 43311 937-593-3566 Larry Sayler, gen mgr.	Cherokee Run Landfill (236)	Logan	clay	120,923	120,923	Lgn-C	IM-2108
Chesterhill Stone Co. 773 East State Route 60 NE P.O. Box 599 McConnelsville, OH 43756 740-962-5621 Carl L. Price, pres.	Buck Farm (240) Fordham Farm (735) East Fultonham (75) Mount Farm (761) Willow Island (675)	Morgan Morgan Muskingum Washington Washington	sand & gravel sand & gravel limestone sand & gravel sand & gravel	50,340 956,786 133,510 432,096	45,790 940,643 133,510 473,736	Mon-588 Mon-CS1 Mum-106 Wn-C1 Wn-C	IM-35 IM-2049 IM-297 IM-2088 IM-1315
Chesterville Sand & Gravel Co., Inc. State Route 95 E P.O. Box 51 Chesterville, OH 43317 419-768-3369 Carrol D. Gleason, pres.	Chesterville Sand & Gravel Co., Inc.(242)	Morrow	sand & gravel	245,438	245,539	Mw-10	IM-258
Christman Quarry 47278 Swazey Rd. Lewisville, OH 43754 740-838-2475 Gerald L. Christman, owner	Christman Quarry (163)	Monroe	limestone	65,174	65,174	Me-C	IM-1088
City Stone LLC 8063 Southern Blvd. Youngstown, OH 44512 330-742-0578 John Annichinni, pres.	City Stone LLC (86)	Trumbull	sandstone	160,000	240,000	Tl-CA	IM-2085
Clark Clay, Inc. 6878 TR 310 Millersburg, OH 44654 330-674-2225 Dennis S. Clark, owner	Clark Clay, Inc. (17)	Holmes	clay			Hs-56	
Clemson Excavating, Inc. 9954 Old State Rd. Chardon, OH 44024 440-286-4757 Bill Clemson, pres.	Clemson (635)	Ashtabula	sand & gravel	31,726	31,726	Asa-C	IM-1278
Cleveland Quarries/ American Stone Corp. P.O. Box 261 Amherst, OH 44001-0261 440-986-4501 James Rallo, pres.	Birmingham Quarry (14) Amherst Quarries (27)	Erie Lorain	sandstone sandstone	6,878	6,878	Ee-21 Ln-3	IM-416 IM-415
M. J. Coates Construction Co., Inc. P.O. Box 41231 Dayton, OH 45441 937-433-1581 Martin J. Coates, owner	M. J. Coates Construction Co., Inc. (548) M. J. Coates Construction Co., Inc. (550)	Greene Greene	sand & gravel sand & gravel	73,863 73,863	73,863 73,863	Ge-47 Ge-G	IM-751 IM-655
Cochran Transportation Services, Inc. P.O. Box 608 Athens, OH 45701 740-593-3906 Charles W. Cochran, pres.	Circle Hill Sand & Gravel, Inc. (458) (87)	Athens	sand & gravel clay	28,506 35	28,506 35	As-595	IM-1083
Boone Coleman Construction, Inc. 32 State Route 239 West Portsmouth, OH 45663 740-858-6661 Boone Coleman, pres.	Boone Coleman Construction, Inc. (73) Coleman Pit (576)	Scioto Scioto	sandstone sand & gravel			So-BC So-B	IM-1252 IM-705

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Bill D. Colwell P.O. Box 261 Somerville, OH 45064 513-726-6800 Bill D. Colwell, owner	Bill D. Colwell Gravel (28)	Butler	sand & gravel	24,000	24,000	Br-36	IM-649
Con-Ag, Inc. 16672 County Rd. 66A North St. Marys, OH 45885 419-394-8870 Robert E. Hirschfeld, pres.	Con-Ag, Inc. (10)	Auglaize	limestone	253,185	182,184	Ae-31	IM-744
County Disposal (Ohio), Inc. dba County Environmental of Wyandot 11164 CR 4 Carey, OH 43316 419-396-3581 Jim Van Weelden, reg.v. pres.	County Disposal (Ohio), Inc. (224)	Wyandot	clay			Wt-CD	IM-2016
County Line Concrete & Supply Co. P.O. Box 176 Gnadenhutten, OH 44629 740-254-4635 William E. Stocker, Chairman	County Line Concrete & Supply Co. (668)	Coshocton	sand & gravel			Cn-C	IM-1311
Countywide Recycling and Disposal Facility 3619 Gracemont St. SW East Sparta, OH 44626 330-874-3855 Tim Vandersall, gen. mgr.	Countywide Landfill (231) Countywide RDF (53)	Stark Stark	clay clay			Sk-CR Sk-217	IM-2020 D-0938
Donald A. Coy 3112 Clark Mill Rd. Norton, OH 44203 330-753-6640 Donald A. Coy, owner	Donald A. Coy (686)	Summit	sand & gravel	9,995	9,995	St-DC	IM-1346
Craigton Shale Co. P.O. Box 6 Lakeville, OH 44638 330-496-3000 Lenny & Bruce Schemrich, owners	Lakeville Sand & Gravel (670) Craigton Shale (165)	Holmes Wayne	sand & gravel shale	106,612	106,612	Hs-C We-25	IM-1303 IM-1209
Cremeans Concrete & Supply Co., Inc. Georges Creek Rd. P.O. Box 475 Gallipolis, OH 45631 740-446-1142 Frank A. Cremeans, pres.	Cremeans Concrete & Supply Co., Inc. (440)	Gallia	sand & gravel			Ga-626	IM-1046
Crosby Gravel, Inc. 9570 State Route 128 Harrison, OH 45030 513-738-0077 Donald Smith, pres.	Crosby Gravel, Inc. (121)	Hamilton	sand & gravel	34,372	34,372	Hmn-44	IM-120
R. A. Cruise Sand & Gravel, Inc. P.O. Box 1066 Ravenna, OH 44266 330-296-4087 Larry A. Cruise, pres.	R. A. Cruise Sand & Gravel, Inc. (261)	Portage	sand & gravel	43,865	43,865	Pe-45	IM-139
Cunningham Asphalt Paving, Inc. P. O. Box 370 Wheelersburg, OH 45694 740-574-6184 Karl Cunningham, pres.	Cunningham Pit (304)	Scioto	sand & gravel			So-83	IM-211

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Custar Stone Co. P.O. Box 629 Napoleon, OH 43545 419-533-7701 Brent Gerken, pres.	Custar Stone Co.(129)	Wood	limestone	434,249	429,270	Wd-5	IM-473
D. & D. Mining Co. 3379 E. Garfield Rd. New Springfield, OH 44443 330-549-3127 Donald Thompson, pres.	D. & D. Strip (130) (130) D. & D. Strip (57) (164)	Columbiana Columbiana	clay shale sandstone clay	3,138 680	3,138 680	Ca-348 Ca-888	IM-976 IM-1181
D & K Materials, Inc. 3141 Congress Lake Rd. Mogadore, OH 44260 330-678-2411 Kimberly S. Ebie, pres.	D & K Materials, Inc.(568) (199)	Portage	sand & gravel clay	39,752	39,752	Pe-101	IM-1154
D. & W. Sand & Gravel 10677 Wren Rd. Mechanicsburg, OH 43044 937-834-2548 Dale Potter, owner	D. & W. Sand & Gravel (49)	Champaign	sand & gravel			Cpn-21	IM-616
D.B.M. Materials, LLC 2040 Alum Creek Dr. Columbus, OH 43207 614-445-8421 John B. Igel, pres.	D.B.M. Materials, LLC (97)	Franklin	sand & gravel			Fn-14	IM-832
D.G.M., Inc. 453 Salisbury Rd. Beaver, OH 45613 740-820-3145 Thomas Salisbury, pres.	Tow Path Ready Mix (664)	Scioto	sand & gravel	48,085	48,085	So-DGM	IM-1280
Darby Creek Excavating, Inc. 6790 Brooksmiller Rd. Circleville, OH 43113 740-477-8600 Kevin R. Steward, pres.	Darby Creek Excavating, Inc. (671)	Pickaway	sand & gravel	108,480	108,480	Pky-DC	IM-1316
De Milta Sand & Gravel, Inc. 921 Erie Rd. Eastlake, OH 44095 440-942-2015 Nick De Milta, pres.	De Milta Sand & Gravel, Inc. (598)	Lake	sand & gravel			Lke-D	IM-1187
Demmy Construction, Inc. 4324 Fairfield Pike Springfield, OH 45502 937-323-4079 Daniel E. Demmy, pres.	Demmy Constuction, Inc.(216) (385)	Clark	limestone sand & gravel	20,823 13,659	20,823 13,659	Ck-501	IM-340
Demmy Sand & Gravel 4324 Fairfield Pike Springfield, OH 45502 937-323-9844 Woodrow Demmy, owner	Demmy Sand & Gravel (54)	Clark	sand & gravel	6,956	6,956	Ck-502	IM-375
A. J. Diana Sons, Inc. 1916 Erie Ave. NW P.O. Box 488 Massillon, OH 44648 330-832-5904 Virgil V. Diana, pres.	Neidert Pit (320)	Stark	sand & gravel			Sk-694	IM-858

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Dingledine Basic Materials, Inc. 2304 Somerville Rd. P.O. Box 262 Somerville, OH 45064 513-726-5258 Gerald Dingledine, pres.	Dingledine Basic Materials, Inc. (32)	Butler	sand & gravel	94,176	65,462	Br-50	IM-739
Dome Minerals, Inc. 15601 Emerick Rd. Kensington, OH 44427 330-223-1413 Fred A. Rogers, owner	Dome Minerals, Inc. (79)	Columbiana	shale	28,253	28,253	Ca-947	IM-935
James E. Downard 1185 Mount Zwingli Rd. Bremen, OH 43107 740-569-7849 James E. Downard, owner	Downard Pit (541) (155)	Fairfield	sand & gravel clay	8,041	8,041	Fd-16	IM-1156
Dravo Lime, Inc. 922 Sprindale Rd. Maysville, KY 41056 606-564-9600 Carl A. Gilbert, pres.	Jones Pit (537) Newtown (128)	Clermont Hamilton	sand & gravel sand & gravel	0 0	750 1,000	Ct-11 Hmn-11	IM-665 IM-133
C. E. Duff & Son, Inc. 9042 State Route 117 P.O. Box 305 Huntsville, OH 43324-0305 937-686-2488 James E. Duff, pres.	C. E. Duff & Son, Inc. (156) C. E. Duff & Son, Inc. (183) C. E. Duff & Son, Inc. (420) C. E. Duff & Son, Inc. (444) C. E. Duff & Son, Inc. (50) Duff Sand Co. (182)	Hardin Logan Logan Logan Logan Logan	limestone sand & gravel sand & gravel sand & gravel limestone sand & gravel	59,046 305 374,861 7,603	59,046 305 374,861 7,603	Hdn-S Lgn-39 Lgn-36 Lgn-12 Lgn-15 Lgn-31	IM-1034 IM-887 IM-1007 IM-1071 IM-453 IM-454
E. A. Construction, Inc. 7013 S. Funk Rd. Shreve, OH 44676 330-496-2531 Ellis Aylsworth, pres.	#1 (613) #1 (74) (185)	Wayne Wayne	sand & gravel sandstone clay	 40,797 4,155	 40,797 4,155	We-24 We-EA	IM-1211 IM-1259
ENZ, Inc. P.O. Box 405 Magnolia, OH 44643 330-866-4510 James R. Demuth, pres.	Fox Pit (225) Sickafoose Pit (205) (203) (203)	Stark Stark	limestone limestone clay shale	 207,237 109,087	 207,237 109,087	Sk-205 Sk-208	D-1144 D-1015
ESSROC Cement Corp. P.O. Box 779 Bessemer, PA 16112 724-667-7702 George Gregory, pres.	Bessemer Pit (57) (34) (34) Carbon Pit (162) (107) (107)	Mahoning Mahoning	limestone clay shale limestone clay shale	22,680 16,864 66,174 542,594	22,680 16,864 66,174 542,594	Mg-608 Mg-EM	IM-4 IM-1056
Eagle Material Supply Ltd. 1400 Tharp Rd. Alexandria, OH 43001 740-924-1066 Rock Van Wey, pres.	Eagle Material Supply Ltd. (600)	Licking	sand & gravel	235,882	255,000	Lg-W	IM-1213
East Clayton Asphalt, Inc. P.O. Box 38 Nelsonville, OH 45764 740-753-1005 Dan Simms, pres.	East Clayton Asphalt, Inc. (21)	Athens	sand & gravel			As-1161	IM-97
East Fairfield Coal Co. 10900 South Ave. P.O. Box 217 North Lima, OH 44452 330-549-2165 W. Thomas Mackall, pres.	Meandering Creek Farms (228) Withers-Petersburg (171) (602) (53) (118)	Mahoning Mahoning	limestone limestone sand & gravel sandstone clay	 1,005,904 4,428	 1,019,318 4,428	Mg-EF Mg-631[1]	IM-2093, IM-2101 IM-1103

[1]This mine began underground limestone mining in 2000.

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
East Liverpool Landfill, Inc. 7916 Chapel St. SE Waynesburg, OH 44688 330-866-3265 David A. Bower, Jr., pres.	East Liverpool Landfill, Inc. (232)	Columbiana	clay			Ca-E	IM-2112
Eaton Sand & Gravel Co. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	Cleves Pit (132)	Hamilton	sand & gravel			Hmn-46	IM-396
David E. Edgington P.O. Box 282 Frankfort, OH 45628 740-998-5328 David E. Edgington, owner	Edgington Pit (573)	Ross	sand & gravel	35,151	35,151	Rs-E	IM-1168
Embro, Inc. 8320 North State Route 123 Franklin, OH 45005 513-746-6121 Ronald Martz, pres.	Embro, Inc. (589)	Warren	sand & gravel			Wan-7	IM-151
Enon Washed Sand & Gravel Co. 1665 Enon Rd. P.O. Box 363 Enon, OH 45323 513-651-5000 John Steele, Jr., pres.	Enon Washed Sand & Gravel Co. (57)	Clark	sand & gravel	312,480	357,870	Ck-3	IM-463
Envirosafe Services of Ohio, Inc. 876 Otter Creek Rd. Oregon, OH 43616 419-255-5100 Douglas E. Roberts, pres.	Johlin Property Clay Mine (238)	Lucas	clay	69,255	69,255	Ls-E	IM-1075, IM-2116
Erie Blacktop, Inc. 4507 Tiffin Ave. P.O. Box 2308 Sandusky, OH 44870 419-625-7374 Dean Wikel, pres.	Erie Blacktop Quarry (24) (637) Erie Blacktop, Inc. (417)	Erie Huron	limestone sand & gravel sand & gravel	181,997 56	181,997 0	Ee-27 Hrn-16	IM-608 IM-975
Erie Materials, Inc. 4507 Tiffin Ave. Sandusky, OH 44870 419-625-7374 Dean Wikel, pres.	Borchardt (83)	Erie	sand & gravel	865	0	Ee-18	IM-676
Erie Sand & Gravel Co. P.O. Box 179 Erie, PA 16512-0179 814-453-6721 Sidney E. Smith, III, pres.	Erie Sand & Gravel Co. (1)	Lake Erie	sand & gravel	8,250	8,250	Ee-dredge	
Feikert Sand & Gravel, Inc. 6971 County Rd. 189 Millersburg, OH 44654 330-674-0038 Lynn O. Feikert, pres.	Feikert Sand & Gravel, Inc. (154)	Holmes	sand & gravel	96,207	96,207	Hs-511	IM-1048, IM-1240
Fenner Sand & Gravel, Inc. 7131 W. Fenner Rd. Ludlow Falls, OH 45339 937-698-7048 Robert P. Snead, pres.	Woodville Concrete Corp. (222)	Miami	sand & gravel	104,000	104,000	Mi-4	IM-472

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Fleming Construction Co., Inc. dba Scioto Sand & Gravel P.O. Box 31 Marion, OH 43301-0031 740-494-2177 Gerald E. Fleming, pres.	Pit #1 (197) Pit #2 (423)	Marion Marion	sand & gravel sand & gravel	32,617 3,752	32,617 3,752	Mn-16 Mn-19	IM-171 IM-990
Flesher Sand & Gravel, Inc. 3322 Clark Mill Rd. Norton, OH 44203 330-745-9239 James E. Fisher, pres.	Flesher Sand & Gravel, Inc. (327)	Summit	sand & gravel	764	764	St-52	IM-900
David Florence Route 4, Box 88 Marietta, OH 45750 740-374-6008 David S. Florence, owner	Florence Pit (80) (163)	Washington	sandstone clay			Wn-F	IM-1208
Foureman's Sand & Gravel, Inc. 2791 Wildcat Rd. Greenville, OH 45331 937-548-1718 Gary B. Foureman, pres.	Foureman's Sand & Gravel, Inc. (80)	Darke	sand & gravel	101,860	160,500	Dke-4	IM-433
Fox Stone Products, Inc. P.O. Box 299 Put-in-Bay, OH 43456 419-285-3025 Richard H. Fox, owner	Fox Stone Products, Inc. (180)	Ottawa	limestone	2,500	3,200	Oa-18	IM-635
Lloyd B. Fry P.O. Box 1515 Piqua, OH 45356 937-773-1940 Lloyd B. Fry, pres.	Lloyd B. Fry (390)	Miami	sand & gravel			Mi-T	IM-696
Frye Sand & Gravel, Inc. 3049 S. Denmark Rd. P.O. Box 3 Dorset, OH 44032-0003 440-858-2627 Harold L. Frye, owner	Frye Sand & Gravel, Inc. (650) Frye Sand & Gravel, Inc. (9)	Ashtabula Ashtabula	sand & gravel sand & gravel	664 2,580	664 2,580	Asa-F Asa-10	IM-1289 IM-198
GANS Ltd. dba Brimfield Sand & Soils 800 West Maple St. Hartville, OH 44632 330-877-2525 Ellis Erb, pres.	GANS Ltd. (605)	Portage	sand & gravel	5,839	2,000	Pe-102	IM-1184
Ganges Gravel Co. P.O. Box 638 Mansfield, OH 44901 419-896-3660 Don Daugherty, pres.	Ganges Gravel Co. (289)	Richland	sand & gravel	35,844	41,094	Rd-18	IM-670
John L. Garber Materials, Inc. Route 8 Lexington, OH 44904 419-884-1567 John L. Garber, pres.	John L. Garber Materials, Inc. (290)	Richland	sand & gravel	227,162	235,000	Rd-14	IM-436
General Motors Power Train 26427 State Route 281 East Defiance, OH 43512 419-782-7010 Michael Chapman, pres.	GMPT borrow area (217)	Defiance	clay			De-3	IM-1351

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Gibson Sand & Gravel Co. 1475 Knorr Rd. Galion, OH 44833 419-468-5820 John Gibson, owner	Gibson Sand & Gravel Co. (724)	Crawford	sand & gravel	648	648	Cd-G	IM-0693
Gillum Bros. Excavating 485 Douglas Ave. Chillicothe, OH 45601 740-773-3425 Robert D. Gillum, pres.	Gillum Bros. Excavating (758)	Ross	sand & gravel	5,000	5,000	Rs-G	IM-2099
Glen-Gery Corp. P.O. Box 207 Iberia, OH 43325 419-468-5002 Steve Matsick, pres.	Iberia Quarry (36)	Marion	shale	207,762	207,762	Mn-7	IM-309
Golden Crescent Construction, Inc. 1104 Milan Ave. Amherst, OH 44001 440-967-6822 Samuel T. Bartlett, pres.	Golden Crescent Construction, Inc. (66)	Lorain	sandstone			Ln-14	IM-1205
Golsch Construction, Inc. 9880 Valley Junction Rd. Cleves, OH 45002 513-353-2555 Gary Golsch, pres.	Golsch (641)	Hamilton	sand & gravel	4,500	5,000	Hmn-G	IM-1270
Joyce A. Good 1203 Kieffer St. Wooster, OH 44691 330-264-6803 Joyce A. Good, owner	Joyce A. Good (508)	Ashland	sand & gravel	2,911	2,911	Ald-G	IM-1121
Goshen Sand & Gravel 1012 Commercial Ave. SE New Philadelphia, OH 44663 330-339-3339 Ben Cookson, Jr., pres.	Benco Leasing dba Goshen Sand & Gravel (389)	Tuscarawas	sand & gravel			Ts-1976	IM-1235
Graymont Dolime (OH) Inc. P.O. Box 158 Genoa, OH 43430 419-855-8336 William Dodge, pres.	GenLime Inc. (85)	Ottawa	limestone	1,317,104	1,460,293	Oa-1[2]	IM-292
Gray Road Fill, Inc. 325 Clark Rd Cincinnati, OH 45215 513-761-4980 Roy B. Schweitzer, pres.	Gray Road Fill, Inc. (211)	Hamilton	limestone			Hmn-GR	IM-1363
Louis A. Green and Associates 1356 N. Fairfield Rd., Suite D Beavercreek, OH 45432 937-431-0143 Louis A. Green, owner	Deam (719)	Clark	sand & gravel			Ck-LG	IM-2073
Green Oaks Potting, Inc. 2222 Lake Rockwell Rd. P.O. Box 979 Ravenna, OH 44266 330-296-2157 John Lyon, pres.	Green Oaks (451) (161) (7)	Portage	sand & gravel clay peat			Pe-89	IM-1142

[2]Graymont Dolime (OH) Inc., and Stansley Mineral Resources operate from the same mine.

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
H. T. Griffin Excavating, Inc. 3950 S. Berkey Southern Rd. Swanton, OH 43558 419-826-0230 Henry T. Griffin, owner	H. T. Griffin Excavating, Inc. (472)	Lucas	sand & gravel			Ls-G	IM-1090
Grimes Excavating Route 3 Box 121 New Matamoras, OH 45767 740-865-3990 Lewis Grimes, owner	Grimes Sand and Gravel (533)	Washington	sand & gravel	162,930	162,930	Wn-1008	IM-1111
Gwin Contracting Co. P.O. Box 205 Columbiana, OH 44408 330-482-2092 Lyle D. Gwin, pres.	Gwin Contracting Co. (30)	Mahoning	sandstone			Mg-62	IM-599
J. M. Hamilton & Sons Co., Inc. 1974 Marion-Bucyrus Rd. Marion, OH 43302 740-382-2189 Oliver E Hamilton, pres.	J. M. Hamilton & Sons Co., Inc. (59)	Marion	limestone	22,287	22,287	Mn-2[3]	IM-423
Hanson Aggregates Davon, Inc. 4281 Roush Rd. Hillsboro, OH 45133 937-364-2311 John B. Patton, pres.	Plum Run Stone (1)	Adams	limestone	1,864,897	1,910,000	Ads-1	IM-237
	Eagle Crushed Stone (184)	Brown	limestone	1,284,471	1,322,450	Bn-EC	IM-1195
	Highland Stone (41)	Highland	limestone	792,875	810,000	Hd-2	IM-230
	Hanson Aggregates Davon, Inc. (219)	Highland	limestone			Hd-D	IM-2071
	Piketon Sand & Gravel (255)	Pike	sand & gravel	450,611	462,773	Pke-24	IM-222
	Scioto Valley Resources (395)	Scioto	sand & gravel	282,780	282,780	So-100	IM-950
Hanson Aggregates Midwest, Inc. 8130 Brint Rd. P.O. Box 278 Sylvania, OH 43560-0278 419-882-0123 John B. Lawson, pres.	Sandusky Quarry (25)	Erie	limestone	4,479,760	4,540,159	Ee-11	IM-263
	Sylvania Quarry (53)	Lucas	limestone	830,108	772,443	Ls-3	IM-580
	Waterville Quarry (52)	Lucas	limestone	182,632	0	Ls-1	IM-575
	Hanson Paulding Plant (86)	Paulding	limestone	234,557	238,448	Pg-7	
	Bloomville Quarry (108)	Seneca	limestone	232,617	1,624	Sa-3	IM-349
	Flat Rock Quarry (107)	Seneca	limestone	1,555,795	1,541,782	Sa-1	IM-347
Harden Agricultural Lime & Reclaim. Svs., Inc. 13865 Nickel Plate Rd. Logan, OH 43138 740-385-5296 Scott R. Harden, owner	Harden Sand & Gravel (679)	Hocking	sand & gravel			Hg-HA	IM-1320
Norman Harpster 16069 State Route 235 Belle Center, OH 43310 937-464-5623 Norman Harpster, owner	Harpster Pit (553)	Hardin	sand & gravel	100	100	Hdn-H	IM-864
Harrison Sand & Gravel Co. 10980 Campbell Rd. Harrison, OH 45030 513-367-5174 Donald L. Gauck, v. pres.	Harrison Sand & Gravel Co. (135)	Hamilton	sand & gravel	11,861	11,861	Hmn-17	IM-295
Hartley Gravel 22941 Hartley Rd. Alliance, OH 44601 330-823-0003 Jacob Maendel, pres.	Hartley Gravel (721)	Columbiana	sand & gravel	9,300	9,300	Ca-H1	IM-2033
Harvest Sand & Gravel, Inc. 2295 Bazetta Rd. Cortland, OH 44410 330-372-4408 Andrew T. Yount, pres.	Harvest Sand & Gravel, Inc. (720) (240)	Columbiana	sand & gravel clay	51,514 285	56,666 314	Ca-H	IM-2027

[3]This mine was operated January through June 2001 by J. M. Hamilton & Sons Co., Inc., and July through December 2001 by National Lime & Stone Co.

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Haubeil & Sons Asphalt & Materials, Inc. 379 Seney Rd. Chillicothe, OH 45601 740-773-6358 George W. Haubeil, pres.	Haubeil & Sons Asphalt & Materials, Inc. (491)	Ross	sand & gravel	92,225	92,225	Rs-H	IM-1052
Haueter Sand & Gravel, Inc. P.O. Box 206 Chardon, OH 44024 440-286-9482 Donald H. Haueter, pres.	Haueter Sand & Gravel, Inc. (108) Haueter Sand & Gravel, Inc. (545)	Geauga Geauga	sand & gravel sand & gravel	184,041 6,982	184,041 6,982	Gea-29 Gea-H	IM-215 IM-510
J. B. Hayes Excavating and Pipeline 758 West Union St. Athens, OH 45701 740-592-3478 James B. Hayes, pres.	J. B. Hayes Excavating and Pipeline (226)	Athens	clay			As-H	IM-2081
Heiser Sand & Gravel Corp. 4833 Wayview St. NW North Canton, OH 44720 330-499-8201 Richard L. Heiser, pres.	Heiser Sand & Gravel Corp. (608) Heiser Sand & Gravel Corp. (609)	Stark Stark	sand & gravel sand & gravel	 32,325	 32,325	Sk-HS Sk-HS1	IM-1193 IM-1203
Hilltop Aggregate, Inc. P.O. Box 100 Mogadore, OH 44260 330-628-4000 Robert W. West, pres.	Hilltop Aggregate, Inc. (262) Hilltop Aggregate, Inc. (737)	Portage Portage	sand & gravel sand & gravel	227,788	227,788	Pe-56 Pe-H	IM-127 IM-2039
Hilltop Basic Resources, Inc. One West Fourth St., Suite 1100 Cincinnati, OH 45202-3615 513-651-5000 John Steele, Jr., pres.	Hilltop Basic Resources, Inc. (747) Fairborn Aggregate Plant (112) West Carrollton Aggregate Plant (232)	Clark Greene Montgomery	sand & gravel sand & gravel sand & gravel	 534,700 578,799	 606,507 671,053	Ck-H Ge-4 My-19	IM-2089 IM-394 IM-401, IM-916
Hocking Valley Concrete, Inc. 35255 Hocking Dr. Logan, OH 43138 740-385-2165 Mark Vaughn, v. pres.	Hocking Valley Concrete, Inc. (151)	Hocking	sand & gravel	78,000	85,000	Hg-262	IM-41
Hocking Valley Mulch 32091 Beech Camp Rd. Logan, OH 43138 740-385-6744 David E. Sheets, Jr., pres.	Sheets Pit (657)	Hocking	sand & gravel			Hg-HV	IM-1284
William A. Hoffman, Jr. 25043 State Route 104 Circleville, OH 43113 740-474-2002 William A. Hoffman, Jr., owner	Hoffman Pit (480)	Pickaway	sand & gravel	1,452	1,452	Pky-H	IM-1039
Hollinger Excavating 2097 Hollansburg-Arcanum Rd. New Madison, OH 45346 937-996-5381 Tom W. Hollinger, leasee	Hollinger Gravel (81)	Darke	sand & gravel	65	65	Dke-10	IM-326
Holmes Limestone Co. P.O. Box 295 Berlin, OH 44610 330-893-2721 Merle Mullet, pres.	241 Plant (44) (19) (19) Bolivar (76) L&M Rainsburg (151)	Holmes Stark Tuscarawas	limestone clay shale clay shale	 3,119 5,059 20,265 36,623	 3,119 5,059 20,265 36,623	Hs-67 Sk-235 Ts-H1	IM-3, IM-768 IM-945 IM-927

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Holmes Supply Corp. 6710 County Rd. 624 Millersburg, OH 44654 330-674-0051 Steve Schlabach, pres.	Holmes Supply Corp. (470)	Holmes	sand & gravel	244,477	244,477	Hs-J	IM-1043
Honey Creek Stone Co. P.O. Box 286 Petersburg, OH 44454 724-654-5537 Carmen W. Shick, pres.	Honey Creek Stone Co. (56) (208)	Mahoning	limestone clay	304,191 63,036	328,958 63,036	Mg-54	IM-93
Terry A. Hoppes 1533 Moorefield Rd. Springfield, OH 45503 937-399-1531 Terry A. Hoppes, pres.	Hoppes (748)	Clark	sand & gravel			Ck-TH	IM-2133
Hugo Sand Co. 7055 State Route 43 Kent, OH 44240 216-587-2700 Dorothy M. Strohm, pres.	Hugo Sand Co. (264)	Portage	sand & gravel	215,609	215,609	Pe-10	IM-138
Hunter Land Development 3672 CR 6-1 Delta, OH 43515 419-822-3744 Glenn Hunter, pres.	Hunter Land Development (690)	Fulton	sand & gravel			Ftn-H	IM-1336
Hydraulic Press Brick Co. 8900 Hemlock Rd. P.O. Box 31330 Independence, OH 44131 216-524-2950 Steven Rowe, pres.	Hydraulic Press Brick Co. (7)	Cuyahoga	shale	245,658	212,358	Cya-19	IM-95
George J. Igel & Co., Inc. 2040 Alum Creek Dr. Columbus, OH 43207 614-445-8421 John B. Igel, pres.	Valley Sand & Gravel, Inc. (627)	Pickaway	sand & gravel	800	800	Pky-C	IM-1223
Inland South Aggregates P.O. Box 276 Petersburg, OH 44454 330-542-1100 Dave Sugar, pres.	Inland South Aggregates (539)	Columbiana	sand & gravel	9,505	12,780	Ca-351	IM-634
JBM Ltd. dba State Rte. 416 Sand & Gravel 764 State Rte. 416 SE New Philadelphia, OH 44663 330-339-4313 William P. Marino, pres.	State Rte. 416 Sand & Gravel (500)	Tuscarawas	sand & gravel	88,103	88,103	Ts-2018	IM-1076
J. L. & Son Excavating, Inc. 8241 Ft. Laurens Rd. NW Strasburg, OH 44680 330-878-5883 Jerry L. Slankard, pres.	Beach City Pit (54)	Tuscarawas	sandstone	1,500	1,500	Ts-2032	IM-1141
JP Sand & Gravel Co. 5911 Lockbourne Rd. P.O. Box 2 Lockbourne, OH 43137 614-497-0083 Richard A. Roberts, pres.	JP Sand & Gravel Co. (98)	Franklin	sand & gravel	441,751	441,751	Fn-52	IM-191

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Jaclib Enterprises, Inc. 560 State Route 554 Cheshire, OH 45620 740-367-0602 Jason C. Leach, pres.	Cheshire Pit (726)	Gallia	sand & gravel	3,705	3,705	Ga-JE	IM-2034
JALIP, LTD. 16303 TR 124 Harpster, OH 43323 740-496-3025 David Herring, owner	JALIP, LTD. (762)	Wyandot	sand & gravel	2,261	2,261	Wt-J	IM-2119
James Bros., Inc. 3930 Boggs Rd. Zanesville, OH 43701 740-454-1522 Daniel G. James, owner	James Sand & Gravel (248)	Muskingum	sand & gravel			Mum-216	IM-689
Janson & Sons Corp. 11829 Spencer Park Rd. Hiram, OH 44234 330-274-8896 Gary Janson, owner	Janson & Sons Corp. (738)	Portage	sand & gravel	101,748	101,748	Pe-J	IM-2051
Janson's Soil Service, Inc. 1492 Mechanicsville Rd. Rock Creek, OH 44084 440-466-3835 Peter E. Janson III, pres.	Janson's Soil Service, Inc. (10) (82) (82)	Ashtabula	sand & gravel clay shale	 200	 200	Asa-14	IM-563
Jarrett Sand Co. 6505 Skadden Rd. Sandusky, OH 44870 419-359-1750 James Jarrett, owner	Jarrett Sand Co. (84)	Erie	sand & gravel	1,008	1,008	Ee-29	
Jaymar, Inc. 8751 North State Route 7 Cheshire, OH 45620 740-992-6637 Jay Hall, Jr., pres.	Jaymar, Inc. (544) Plant #4 (560) Plant #5 (559)	Gallia Meigs Meigs	sand & gravel sand & gravel sand & gravel	 567,256 	 567,256 	Ga-J Ms-308 Ms-L	IM-1145 IM-1174 IM-1159
Jefferson Materials Co. 8505 State Route 14 Streetsboro, OH 44241 330-626-3816 Mark Shelly, pres.	Jefferson Materials Co. (265)	Portage	sand & gravel	396,055	396,055	Pe-63	IM-82
Louis Johnson 9780 State Route 62 Orient, OH 43146 614-877-4184 Louis Johnson, owner	Darby Materials Plant #5 (648)	Pickaway	sand & gravel			Fn-C	IM-1265
Van Johnson Construction, Inc. 2672 Eckert Rd. Lancaster, OH 43130 740-687-6043 Molly D. Johnson, pres.	Molly Johnson Mining (695) (206)	Fairfield	sand & gravel clay			Fd-VJ	IM-1339
Johnson Road Sand & Gravel 510 Johnson Rd. Kent, OH 44240 330-673-3396 Robert K. Heimann, pres.	Johnson Road Sand & Gravel (615)	Portage	sand & gravel			Pe-98	IM-1219, IM-1231
Johnson Stone Products, Inc. 14647 State Route 511 P.O. Box 39 Oberlin, OH 44074 440-774-1601 Terry A. Johnson, pres.	Kipton Quarry (75)	Lorain	sandstone			Ln-J	IM-1300

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Joseph Sand & Gravel, Inc. 16272 Boundary Rd. Wapakoneta, OH 45895 419-568-3788 Kenneth D. Burden, pres.	Joseph Sand & Gravel, Inc. (23)	Auglaize	sand & gravel	20,202	20,202	Ae-23	IM-508
K.C.C.I. P.O. Box 1298 Steubenville, OH 43952 740-543-4389 David Krulock, pres.	Apex (176)	Jefferson	limestone	112,617	112,617	Jfn-K	IM-1164
K. M. A. Services 6741 North St. Newark, OH 43055 740-587-0565 Kim M. Ault, owner	K. M. A. Services (729)	Licking	sand & gravel			Lg-KMA	IM-2043
Keeney Sand & Stone, Inc. 13320 Girdled Rd. Painesville, OH 44077 440-254-4582 Dennis J. Keeney, pres.	Keeney Sand & Stone, Inc. (60)	Lake	sandstone	84,352	84,352	Lke-K	IM-859
Kelcher Environmental, Inc. 6834 Loop Rd. Centerville, OH 45459 937-434-1334 Todd H. Kelcher, pres.	Santefost Property (228)	Butler	clay			Br-K	IM-2041
Kellstone, Inc. P.O. Box 25527 Garfield Heights, OH 44125 216-883-7200 James A. Palladino, pres.	Kellstone, Inc. (174)	Erie	limestone	931,985	931,985	Ee-K	IM-727
Kilbarger Construction, Inc. P.O. Box 946 Logan, OH 43138 740-385-6019 Edward Kilbarger, pres.	David Sheets (523)	Hocking	sand & gravel	21,975	21,975	Hg-329	IM-1112
Kimble Clay & Limestone Co. 3596 State Route 39 NW Dover, OH 44622-9801 330-343-1226 Keith B. Kimble, pres.	Kimble Clay & Limestone Co. (117) (41) (63) (63)	Tuscarawas	limestone sandstone clay shale	39,338	39,338	Ts-1818	IM-9
King Limestone, Inc. 53681 Spencer Rd. Cumberland, OH 43732 740-638-3942 Duane King, pres.	King Limestone, Inc. (147)	Guernsey, Muskingum	limestone	304,176	304,176	Gy-309	IM-1030
King Quarries, Inc. 41820 TR 4 Caldwell, OH 43724 740-732-2923 Mary King, pres.	King Quarries, Inc. (194) King Quarries, Inc. (197)	Noble Noble	limestone limestone	 77,820	 77,820	Ne-K Ne-K1	IM-1254 IM-1292
Kinsman Materials, LTD. P.O. Box 76 Chardon, OH 44024 440-293-5400 Bill Clemson, pres.	Kinsman Materials, LTD. (593)	Ashtabula	sand & gravel	87,172	87,172	Asa-20	IM-1198
Kipp's Gravel Co., Inc. 4987 State Route 222 Batavia, OH 45102 513-732-1024 Melvin M. Kipp, pres.	Kipp's Gravel Co., Inc. (61)	Clermont	sand & gravel	72,648	72,648	Ct-7	IM-432

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Kirby's Sand & Gravel, Inc. 4876 County Hwy. 43 Upper Sandusky, OH 43351-9155 419-927-2260 Gene Kirby, owner	Kirby's Sand & Gravel, Inc. (382) Kirby's Sand & Gravel, Inc. (591)	Wyandot Wyandot	sand & gravel sand & gravel	92,990	92,990	Wt-17 Wt-K	IM-604 IM-943
Knox County Board of Commissioners 110 East High St. Mt. Vernon, OH 43050 740-397-1590 James Henry, county engineer	Apple Valley (148)	Knox	shale	2,700	2,700	Kx-K	IM-870
Koch-Glitsch, Inc. Knight Division P.O. Box 30070 East Canton, OH 44730 330-488-1651 Mike Graeff, pres.	Koch-Glitsch, Inc. (174)	Stark	clay			Sk-K	IM-1236
Krizman Enterprises 53100 Placid Dr. South Bend, IN 46637 219-272-8887 David J. Krizman, pres.	Krizman Enterprises (743)	Tuscarawas	sand & gravel			Ts-K	IM-2050
T & K Kuhnle Co. P.O. Box 375 Newbury, OH 44065 440-564-7168 Bob Russell, v. pres.	Munn Rd. Sand & Gravel (518)	Geauga	sand & gravel	103,097	103,097	Gea-TK	IM-902
L & I Natural Resources, Inc. 10369 Cones Rd. Loveland, OH 45140 513-459-7716 Jerry Walker, pres.	L & I Pit & Mill (430)	Warren	sand & gravel	91,941	91,941	Wan-50	IM-1006
L & M Mineral Co. 5205 State Route 39 Millersburg, OH 44654 330-893-2227 John E. Ling, Jr., pres.	Evans, Heil (64) Luikart (65) (65) Spring Industries (588) Spring (170) (691) (55) (77) (77)	Tuscarawas Tuscarawas Tuscarawas Tuscarawas 	shale clay shale sand & gravel limestone sand & gravel sandstone clay shale	51,242 9,350 3,820	51,242 9,350 3,820	Ts-1884 Ts-1914 Ts-SI Ts-1982	IM-6 D-0701 IM-569 IM-621
LUB, Inc. 4174 East Pike Zanesville, OH 43701 740-452-3668 Otto Luburgh, pres.	LUB, Inc. (756)	Muskingum	sand & gravel	25,000	30,500	Mum-LB	IM-2106
Lafarge Corp. Great Lakes Region P.O. Box 160 Paulding, OH 45879 419-399-4861 Philippe Rollier, pres.	Paulding Quarry (87) (42)	Paulding	limestone clay	757,115 132,036	763,115 132,036	Pg-1	IM-513
Lafarge North America 555 Frost Rd., Suite 100 Streetsboro, OH 44241 800-352-3250 Todd Ohlheiser, v. pres.	Petersburg (212) Marblehead (84) Shalersville Plant-Northern Division (277)	Mahoning Ottawa Portage	limestone limestone sand & gravel	357,986 3,133,935 739,054	494,261 3,780,448 637,731	Mg-L Oa-7 Pe-68	IM-1353 IM-440 IM-660, IM-1047, IM-1107, IM-1124
	Navarre (453)	Stark	sand & gravel			Sk-241	IM-582

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
LaMar Sand & Fill, Ltd. 9090 State Route 73 Hillsboro, OH 45133 937-393-1264 Larry Miller, owner	LaMar Pit (656)	Highland	sand & gravel			Hd-L	IM-1297
Laidlaw Waste Systems (Celina), Inc. 6141 Depwig Rd. Celina, OH 45822 937-593-0057 Eric Hildreth, gen. mgr.	Laidlaw Waste Systems (Celina), Inc. (209)	Mercer	clay	20,725	20,725	Mr-C	IM-1341, IM-2107
Lakeside Sand & Gravel Co. 3431 Frost Rd. Mantua, OH 44255 330-274-2569 Larry Kotkowski, pres.	Lakeside Sand & Gravel Co. (268) Lakeside Sand & Gravel Co. (661)	Portage Portage	sand & gravel sand & gravel	 437,481	 437,481	Pe-40 Pe-LS	IM-190 IM-1293
Lancaster Limestone 35380 Hocking Dr. Lancaster, OH 43138 740-385-2625 Lucas A. Horn, pres.	Lancaster Limestone (752)	Hocking	sand & gravel	1,300	1,300	Hg-L	IM-2117
Latham Limestone, Inc. P.O. Box 77 Latham, OH 45646 740-493-2677 Robert Murray, pres.	Latham Limestone (91)	Pike	limestone	284,125	285,000	Pke-13	IM-213
Leetonia Sand & Gravel Co., Inc. P.O. Box 236 Canfield, OH 44406 330-427-1015 Stephen Holowach, pres.	Leetonia Sand & Gravel Co., Inc. (463) (65)	Columbiana	sand & gravel sandstone			Ca-982	IM-1108
Lingvai Peat Co. 01693 CR 8 Edgerton, OH 43517 419-298-2058 Ronald Lingvai, owner	Lingvai Peat Co. (4)	Williams	peat			Ws-17	
Link Trucking Co., Inc. 7305 State Route 669 N McConnelsville, OH 43756 740-962-4480 Paul Kussmaul, pres.	Link Trucking Co., Inc. (647)	Morgan	sand & gravel	22,887	22,887	Mon-L	IM-1266
Little Miami Sand & Gravel P.O. Box 36 Lebanon, OH 45036 513-932-3221 Paul N. Herdman, pres.	Little Miami Sand & Gravel Plant #1 (391) Little Miami Sand & Gravel Plant #2 (429)	Warren Warren	sand & gravel sand & gravel	0 0	1,505 1,600	Wan-B Wan-46	IM-679 IM-842
Logan Construction 3610 CR 50 Rushsylvania, OH 43347 937-468-2356 Todd Mobley, owner	Logan Construction (731)	Logan	sand & gravel			Lgn-L	IM-2064
London Tile Co. 65 Walnut St. New London, OH 44851 419-929-1551 Sylvia Danison, pres.	Biglow (1)	Ashland	shale			Ald-1	IM-334
Loxley Aggregates, Inc. 4277 Falls Rd. Lewisburg, OH 45338 937-839-5488 Matthew L. Loxley, pres.	Loxley Aggregates, Inc. (488) (101)	Preble	sand & gravel clay	2,495 1,696	2,495 1,696	Pre-9	IM-1095

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Luburgh Inc. 4174 East Pike Zanesville, OH 43701 740-452-3668 Otto Luburgh, pres.	Luburgh Clay Pit (210)	Muskingum	clay	34,500	34,500	Mum-L	IM-1344
Lucky Sand & Gravel Co. 12018 Frost Rd. Mantua, OH 44255 330-562-6196 Bernard Udelson, pres.	Lucky Sand & Gravel Co. (570)	Portage	sand & gravel	73,198	73,198	Pe-L	IM-154
M & J Sand & Gravel, Inc. 114½ E. Fourth St. Williamstown, WV 26187 304-375-9939 Gale Wilson, pres.	M & J Sand & Gravel, Inc. (590) (152)	Washington	sand & gravel clay			Wn-1010	IM-1163
M & M Builders Supply Co. 5820 Carbon Hill Rd. East Palestine, OH 44413 330-426-9958 Hugh Madden, owner	M & M Builders Supply Co. (47) (106)	Columbiana	sandstone clay			Ca-970	IM-1024
Al Mackey Enterprises, Inc. P.O. Box 269 Swanton, OH 43558 419-826-7700 Al Mackey, pres.	Lynch Property (622)	Fulton	sand & gravel			Ftn-M	IM-1246
	Eton (639)	Fulton	sand & gravel			Ftn-M1	IM-1275
	Mackey (655)	Fulton	sand & gravel	523	523	Ftn-M2	IM-1294
	20A Pit (646)	Lucas	sand & gravel			Ls-M	IM-1261
	Nebraska (681)	Lucas	sand & gravel			Ls-AM	IM-1318
	Schaeffer Pit (753)	Lucas	sand & gravel	911	911	Ls-M1	IM-2137
MacRitchie Materials, Inc. P.O. Box 90 West Millgrove, OH 43467 419-288-2790 Donald B. MacRitchie, pres.	MacRitchie Materials, Inc. (130)	Wood	limestone	308,013	421,353	Wd-1	IM-548
Marshall Quarry, Inc. 11199 State Route 124 Hillsboro, OH 45133 937-466-2560 Ronald L. Main, pres.	Marshall Quarry, Inc. (43)	Highland	limestone	473	473	Hd-4	IM-406
Marta Track Constructors, Inc. P.O. Box 1509 Washington, PA 15301 724-225-6155 Thomas P. Stout, pres.	Marta Track Constructors, Inc. (692) (214)	Huron	sand & gravel clay			Hrn-M	IM-1338
Martin Marietta Aggregates 300 Star Ave., Suite 312 Parkersburg, WV 26101 304-485-7341 John M. Hays, v. pres.	Apple Grove Plant (209)	Meigs	sand & gravel	690,000	660,813	Ms-205	IM-30
Martin Marietta Aggregates 4770 Duke Dr., Suite 200 Mason, OH 45040 513-701-1140 Geoff Harris, pres.	Fairfield II Gravel (33)	Butler	sand & gravel			Br-14	IM-147
	Fairfield Sand & Gravel (30)	Butler	sand & gravel	1,924,000	2,337,000	Br-35	IM-200
	Hamilton (29)	Butler	sand & gravel	696,000	770,000	Br-5	IM-153
	Ross Sand & Gravel (34)	Butler	sand & gravel	729,000	744,000	Br-29	IM-149
	Fairborn Gravel (52)	Clark	sand & gravel	708,000	587,000	Ck-13	IM-366
	Fort Jefferson Limestone (19)	Darke	limestone	190,000	240,000	Dke-1	IM-362
	Delaware #332 (22)	Delaware	limestone	1,000,539	1,015,237	Del-3	IM-327
	Meredith Quarry #359 (23)	Delaware	limestone	126,762	204,121	Del-2	IM-299
	Shawnee #324 (20)	Delaware	limestone	897,323	897,845	Del-4	IM-262
	Blue Rock Limestone #342 (27)	Fayette	limestone			Fe-2	IM-169
	Columbus #319 (95)	Franklin	sand & gravel	825,245	454,656	Fn-6	IM-185
	Columbus Limestone #321 (31)	Franklin	limestone	2,990,054	2,600,916	Fn-53	IM-185
	Lockbourne #213 (96)	Franklin	sand & gravel	997,907	0	Fn-23	IM-183
	Marble Cliff #323 (30)	Franklin	limestone	1,608,233	1,445,665	Fn-2	IM-261
	Cedarville Limestone (32)	Greene	limestone	1,165,000	813,000	Ge-17	IM-435
	Haines Rd. (405)	Greene	sand & gravel	0	10	Ge-32	IM-400
	Spring Valley Gravel (404)	Greene	sand & gravel	813,000	907,000	Ge-42	IM-954

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Martin Marietta Aggregates (cont.)	Spring Valley North (441)	Greene	sand & gravel	5,000	5,000	Ge-38	IM-333
	Xenia Gravel (110)	Greene	sand & gravel	813,000	659,000	Ge-33	IM-379
	Camp Dennison Gravel (127)	Hamilton	sand & gravel	153,000	151,000	Hmn-5	IM-148
	E-town Sand & Gravel (134)	Hamilton	sand & gravel	406,000	350,000	Hmn-71	IM-771
	E-town Sand & Gravel (680)	Hamilton	sand & gravel	493,000	493,000	Hmn-P	IM-1333
	Harrison Sand & Gravel (118)	Hamilton	sand & gravel	669,000	610,000	Hmn-37	IM-170
	Miamitown (468)	Hamilton	sand & gravel			Hmn-D	IM-1079
	Lynchburg Quarry (175)	Highland	limestone	789,000	957,000	Hd-M	IM-1170
	East Liberty #326 (49)	Logan	limestone	124,368	123,104	Lgn-1	IM-574
	Prospect S & G #362 (198)	Marion	sand & gravel			Mn-4	IM-290
	Troy Gravel (219)	Miami	sand & gravel	519,000	552,000	Mi-3	IM-462, IM-658
	Dayton Limestone (71)	Montgomery	limestone			My-23	IM-368
	Phillipsburg Limestone #339 (70)	Montgomery	limestone	1,195,250	1,035,368	My-1	IM-374
	Rip Rap Rd. (224)	Montgomery	sand & gravel	0	10,000	My-66	IM-677
	Franklin Gravel (349)	Warren	sand & gravel	345,000	418,000	Wan-38	IM-615
Martin Marietta Magnesia Specialties, Inc. 755 Lime Rd. Woodville, OH 43469 419-849-4200 Steve Raffensperger, pres.	Woodville Quarry (102)	Sandusky	limestone	2,459,555	2,649,953	Sy-1	IM-537
R.J. Martin Service & Excavating 1875 Roxanna-New Burlington Rd. Waynesville, OH 45068 937-862-4182 Roger J. Martin, pres.	Horseshoe Bend Sand & Gravel (403)	Greene	sand & gravel	906	906	Ge-40	IM-923
Mason's Sand & Gravel Co./ George C. Smith 2385 Rathmell Rd. Obetz, OH 43207 614-491-3611 George C. Smith, pres.	Mason's Sand & Gravel Co. (100)	Franklin	sand & gravel	140,886	140,886	Fn-11	IM-234
Massillon Materials, Inc. 26 N. Cochran St. P.O. Box 499 Dalton, OH 44618 330-837-4767 Howard J. Wenger, pres.	Massillon Materials, Inc. (495)	Stark	sand & gravel	610,150	610,150	Sk-M	IM-1031
	MMI Warmington Plant (685)	Stark	sand & gravel	78,560	78,560	Sk-M1	IM-1332
	MMI Sandyville Plant (687)	Tuscarawas	sand & gravel	746	746	Ts-MM	IM-1324
Mathews Sand & Gravel 5061 Monroe Center Conneaut, OH 44030 440-594-1130 Edward G. Mathews, owner	Mathews Sand & Gravel (651)	Ashtabula	sand & gravel	720	720	Asa-M	IM-1301
Maxville Quarries, Inc. 7957 State Route 668 South Logan, OH 43138 740-385-2568 David J. McCort, pres.	St. Clair (222)	Hocking	limestone	82,786	82,786	Hg-M	IM-2057
	Carpenter (168)	Perry	limestone			Py-343	IM-1061
	Downhour (89)	Perry	limestone	82,786	82,786	Py-235	IM-515
Mecco, Inc. 2504 S. Main St. Middletown, OH 45042 513-422-3781 David T. Morgan, pres.	Mecco, Inc. (39)	Butler	sand & gravel	225,677	237,000	Br-15	IM-316
Mechanicsburg Sand & Gravel, Inc. P.O. Box 18 Mechanicsburg, OH 43044 937-834-2606 James G. Cushman, pres.	Mechanicsburg Sand & Gravel, Inc. (50)	Champaign	sand & gravel	192,622	192,622	Cpn-22	IM-889

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Meigs County Commissioners 34110 Fairground Rd. Pomeroy, OH 45769 740-992-2895 Jeff Thornton, commissioner	Meigs County Commissioners (211)	Meigs	sand & gravel	17,221	15,441	Ms-301	IM-619
The Melvin Stone Co., LLC P.O. Box 158 Sabina, OH 45169 937-584-2486 Dennis J. Garrison, pres.	Melvin (17)	Clinton	limestone	1,817,706	1,816,971	Cln-1	IM-241
	Fayette (28)	Fayette	limestone			Fe-1	IM-831
	Bowersville (217)	Greene	limestone	187,425	283,020	Ge-M	IM-2052
	Circleville (481)	Pickaway	sand & gravel	307,760	265,858	Pky-R	IM-993
	Williamsport (92)	Pickaway	limestone	405,036	355,285	Pky-4	IM-209
	Plano Road (199)	Ross	limestone	438,545	277,168	Rs-MC1	IM-1298
Menuez Bros. Sand & Gravel, Inc. 5366 County Rd. 349 Route 1 Millersburg, OH 44654 330-674-4254 James T. Menuez, v. pres.	Menuez Bros. Sand & Gravel, Inc. (153)	Holmes	sand & gravel	187,356	189,000	Hs-82	IM-707
Mesenburg Bros., Inc. 2366 Wells Rd Collins, OH 44826 419-668-5691 Peter J. Mesenburg, pres.	Mesenburg Bros., Inc. (20)	Huron	sandstone	3,716	3,716	Hrn-8	IM-268
Miami River Stone Co. 1700 Miami River Rd. Sidney, OH 45365 937-492-5412 Thomas P. Milligan, pres.	Miami River Stone Co. (110)	Shelby	limestone	560,764	558,071	Shy-17	IM-389
	(311)		sand & gravel	146,381	137,353		
	Rock Run (111)	Shelby	limestone	367	367	Shy-16	IM-411
	Staley Pit (224)	Shelby	limestone	7,778	0	Shy-SS	IM-438
	(577)		sand & gravel	2,655	52,210		
	Washington Twp. Pit (312)	Shelby	sand & gravel			Shy-13	IM-412
Miami View Mining Co., Ltd. 998-B East Ridge Dr. Lebanon, OH 45036 513-494-1238 David Oeder, managing mbr.	Miami View (688)	Warren	sand & gravel	555,821	555,821	Wan-MV	IM-1329
Doug Mill 1800 Mt. Vernon Rd. Newark, OH 43055 740-763-3901 Doug & Susan Mill, owners	Newark (174)	Licking	sand & gravel			Lg-2	IM-184
Miller Bros. Gravel, Inc. 7900 S. Kessler-Frederick Rd. Tipp City, OH 45371 937-836-0981 Thomas O. Miller, pres.	Miller Bros. Gravel, Inc. (233)	Montgomery	sand & gravel	365,901	334,506	My-52	IM-348
	Miller Bros. Gravel, Inc. (447)	Miami	sand & gravel			Mi-504	IM-1032
Miller Sand & Gravel, Inc. 10228 State Route 82 Windham, OH 44288 330-326-3157 Brian K. Miller, pres.	Miller Sand & Gravel, Inc. (272)	Portage	sand & gravel	1,121	1,121	Pe-39	IM-1078
Millersville Lime Inc. 3964 CR 41 Millersville, OH 43435-9786 419-638-2511 Bob Durks, pres.	Millersville Plant (103)	Sandusky	limestone	524,636	422,790	Sy-4	IM-381
	Woodville Plant (104)	Sandusky	limestone			Sy-3	IM-282
Mills Rock, Sand, & Soil, Inc. 4022 State Route 303 Mantua, OH 44255 330-297-7579 Alvin Mills, pres.	303 Sand & Gravel (676)	Portage	sand & gravel	30,611	30,611	Pe-M	IM-1312

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Mitchell Transport, Inc. 1300 E. 9th St., Suite 1100 Cleveland, OH 44114-1503 216-942-9191 Robert Amos, pres.	North Park Reclamation Clay Center (92)	Lake	clay			Lke-M	IM-1059
Moon Enterprises, Inc. 2701 South Eber Rd. Monclova, OH 43542 419-866-1317 Kenneth Mark Moon, pres.	Moon Enterprises, Inc. (683)	Lucas	sand & gravel			Ls-ME	IM-1345
Moore's Excavating Co. 2222 N. U.S. Hwy 68 Urbana, OH 43078 937-653-6288 Dorothy Moore, pres.	Moore's Excavating Co. (51) (153) Moore's Excavating Co. (619) Moore's Excavating Co. (620)	Champaign Champaign Clark	sand & gravel clay sand & gravel sand & gravel	17,735 8,741 6,857	17,735 0 0	Cpn-20 Cpn-25 Ck-29	IM-482 IM-1227 IM-1233
Moraine Materials Co., Inc. 9661 Sugar St. Germantown, OH 45327 937-855-2228 George Kling, pres.	Moraine Materials Co., Inc. Plant 22 (41) Moraine Materials Co., Inc. Plant 21 (239) (10)	Butler Montgomery	sand & gravel sand & gravel peat	291,257 291,662	291,257 291,662	Br-6 My-41	IM-177 IM-360
Morrow Gravel Co. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	Urbana (48) Rockford Quarry (63) Pike County (693) Morrow Gravel Co. (501) Morrow Gravel Co. (502) Morrow Plant (503)	Champaign Mercer Pike Warren Warren Warren	sand & gravel limestone sand & gravel sand & gravel sand & gravel sand & gravel	189,967 146,631 37,284	189,967 254,536 37,284	Cpn-1 Mr-2 Pke-M Wan-M Wan-M1 Wan-M2	IM-371 IM-430 IM-1325 IM-728, IM-1065 IM-1051 IM-837
Morton International, Inc. Morton Salt Division 151 S. Industrial St. P.O. Box 337 Rittman, OH 44270-0337 330-925-3015 Jay Stewart, pres.	Morton Salt Well Field (5)	Wayne	salt	533,070	550,523	We-9129	
Morton International, Inc. Morton Salt Division P.O. Box 428 Grand River, OH 44045-0428 440-639-4243 Paul R. Schank, facility mgr.	Fairport Mine (2)	Lake	salt	1,460,198	1,512,440	Lke-6	
Mt. Eaton Reclamation, Inc. P.O. Box 256 Mt. Eaton, OH 44659 330-359-5364 Freeman Mullet, pres.	Mt. Eaton Reclamation, Inc. (64) (144) (144)	Wayne	sandstone clay shale	35,776	35,776	We-26	IM-690, IM-1210
Muskingum River Gravel Co. P.O. Box 1585 Zanesville, OH 43702-1585 740-453-0721 Richard A. McClelland, pres.	S & S Aggregate #8 (152) Plant #4 (448) S & S Agg (755) S & S Aggregate #1 (247) S & S Agg #16 (257) S & S Aggregate Plant #7 (452) Plant #2 (367)	Hocking Muskingum Muskingum Muskingum Portage Ross Washington	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel	138,141 182,186 324,374 179,149 19,592	140,066 183,689 315,815 181,937 51,860	Hg-301 Mum-262 Mon-M Mum-228 Pe-15 Rs-M Wn-38	IM-458 IM-422 IM-0718 IM-421 IM-104 IM-114 IM-701
National Aggregates, Inc. P.O. Box 340 Malvern, OH 44644 330-866-1999 William Scheckler, pres.	National Aggregates, Inc. (610)	Stark	sand & gravel	446,184	446,184	Sk-1017	IM-1186
National Lime & Stone Co. P.O. Box 120 Findlay, OH 45839-0120 419-422-4341 R. W. Kruse, v. chairman	Lima Plant (5) Buckland Plant (11) Wapakoneta Plant (24) Bucyrus Plant (18) Delaware Plant (21)	Allen Auglaize Auglaize Crawford Delaware	limestone limestone sand & gravel limestone limestone	721,000 510,000 190,000 2,724,000 4,307,000	721,000 510,000 190,000 2,724,000 4,307,000	An-3 Ae-10 Ae-30 Cd-1 Del-5	IM-484 IM-486 IM-598 IM-404 IM-207

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
	Findlay Plant (149)	Hancock	limestone	1,401,000	1,401,000	Hk-7	IM-1002
	Ridge Quarry (196)	Hancock	limestone			Hk-A[4]	IM-1299
	County Lime Quarry (218)	Hardin	limestone			Hdn-N	IM-2072
	Marion Plant (60)	Marion	limestone	957,000	957,000	Mn-3	IM-168
	National Lime & Stone, Inc. (59)	Marion	limestone			Mn-2[5]	IM-423
	Rimer Plant (231)	Putnam	limestone	206,000	206,000	Pm-N	IM-0479
	Carey Plant (134)	Wyandot	limestone	2,814,000	2,814,000	Wt-1	IM-405
	Sammet (763)	Wyandot	sand & gravel			Wt-N	IM-2123
	Upper Sandusky Plant (380)	Wyandot	sand & gravel	217,000	217,000	Wt-15	IM-376, IM-551
Neer's Sand & Gravel 4859 Township Rd. 45 Bellefontaine, OH 43311 937-585-6733 Arden J. Neer, Sr., owner	Neer's Sand & Gravel (189)	Logan	sand & gravel	153,012	176,448	Lgn-6	IM-459
Nelson Sand & Gravel, Inc. P.O. Box 466 Kingsville, OH 44048 440-224-0198 Thomas H. Nelson, pres.	Nelson Sand & Gravel, Inc. (14)	Ashtabula	sand & gravel			Asa-12	IM-1130
	Nelson Sand & Gravel, Inc. (746)	Ashtabula	sand & gravel	87,500	87,500	Asa-N1	IM-2102
New Baltimore CDD Landfill, Ltd. 6950 River Rd. New Baltimore, OH 45030 513-385-9031 Thomas & Kenneth Henke, owners	New Baltimore CDD Landfill, Ltd. (700)	Hamilton	sand & gravel			Hmn-NB	IM-1337
	(216)		clay				
Newbury Sand and Gravel 15365 Ravenna Rd. Burton, OH 44021 440-834-0200 Blaine M. Kaufman, owner	Newbury Sand and Gravel (517)	Geauga	sand & gravel			Gea-N	IM-1123
	(50)						
New Carlisle Sand & Gravel Co. 6090 S. Scarff Rd. New Carlisle, OH 45344 937-845-8434 James R. Upton, owner	New Carlisle Sand & Gravel Co. (217)	Miami	sand & gravel	640	640	Mi-501	
Newton Asphalt Paving, Inc. P.O. Box 86 Strasburg, OH 44680 330-878-5648 George A. Gessner, pres.	516 (428)	Tuscarawas	sand & gravel	148,994	148,994	Ts-2001	IM-1004
Nick's Trucking 14228 Madison Rd. Middlefield, OH 44062 216-299-2165 Nick R. Loze, owner	Nick's Trucking (584)	Trumbull	sand & gravel	3,500	3,500	Tl-16	IM-1158
J. E. Nicolozakes Co. 62920 Georgetown Rd. Cambridge, OH 43725 740-435-3222 John E. Nicolozakes, pres.	Bank One (744)	Tuscarawas	sand & gravel			Ts-N	IM-2032
Andy Nixon Contractors, Inc. 13307 CR J35 Montpelier, OH 43543 419-737-2060 Carol J. Nixon, pres.	Nixon Pit (665)	Williams	sand & gravel	88,384	88,384	Ws-N	IM-1291
	(223)		clay	145	145		

[4]This mine was operated January and February 2001 by Stansley Mineral Resources and March through December 2001 by National Lime & Stone Co.
[5]This mine was operated January through June 2001 by J. M. Hamilton & Sons, Inc., and July through December 2001 by National Lime & Stone Co.

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Northern Ohio Paving Co. 1749 Highland Dr. Twinsburg, OH 44087 330-425-7861 Mark Shelly, pres.	Allied Plant #3 (316)	Stark	sand & gravel	587,710	587,710	Sk-N	IM-156
North Shore Stone Quarries, Inc. 72 Fernhill Ave. Columbus, OH 43228 614-878-0620 Clifford Hammond, pres.	North Shore Stone Quarries, Inc. (109)	Seneca	limestone	4,489	4,489	Sa-8	IM-313
Northwest Ohio Property Developments, Ltd. P.O. Box 14 Defiance, OH 43512 419-784-4850 Paul E. Gaeke, pres.	Northwest Ohio Property Developments, Ltd. (750)	Fulton	sand & gravel	13,268	13,268	Ftn-NW	IM-2138
Nuway Services, Inc. 3441 Sportsman Club Rd. Johnstown, OH 43031 740-587-2451 George M. McInturff, Sr., pres.	Hopewell (229)	Licking	clay	60,650	60,650	Lg-NU	IM-2046
Carl E. Oeder & Sons Sand & Gravel 3890 Turtlecreek Rd. Lebanon, OH 45036 513-494-1238 Carl E. Oeder, pres.	Carl E. Oeder & Sons Sand & Gravel (352)	Warren	sand & gravel	423,102	423,102	Wan-41	IM-629
Oglebay Norton Industrial Sands, Inc. P.O. Box 1000 Zanesville, OH 43702-1000 800-522-0171 Jeff Gray, pres.	Millwood Plant (24) Glass Rock Plant (48) (137)	Knox Perry	sandstone sandstone clay	122,116 186,340	122,116 186,340	Kx-1 Py-344	IM-269 IM-1014
Ohio Asphaltic Limestone Corp. 8591 Mad River Rd. Hillsboro, OH 45133 937-364-2191 W. C. Mason, pres.	Ohio Asphaltic Limestone Corp. (220) Ohio Asphaltic Limestone Corp. (221) Ohio Asphaltic Limestone Corp. (42)	Highland Highland Highland	limestone limestone limestone	 482,490	 482,490	Hd-O Hd-O1 Hd-3	IM-2056 IM-2068 IM-253
Ohio Bulk Transfer Co. P.O. Box 25527 Garfield Heights, OH 44125 216-883-7200 James Palladino, pres.	Twinsburg Sand & Gravel (68)	Summit	sandstone			St-60	IM-1206
Ohio-West Virginia Excavation 57245 Ferry Landing Rd. Dilles Bottom, OH 43947 740-676-7464 Dennis Hendershot, pres.	OH-WV Excavation (424)	Monroe	sand & gravel			Me-508	IM-1000
Olen Corp. 4755 South High St. Columbus, OH 43207-4028 614-491-1515 Ken Holland, pres.	Stewart Plant #4 (459) Columbus Plant #3 (465) Hilliard Plant #1(154) Darel L. Hathaway (728) Fredericktown Plant #2 (161) St. Louisville Plant #5 (176) McCarthy Quarry (133)	Athens Franklin Franklin Knox Knox Licking Wyandot	sand & gravel sand & gravel limestone sand & gravel sand & gravel sand & gravel limestone	23,024 2,208,386 575,590 488,910 353,893 328,802	23,024 2,550,000 575,590 525,000 400,000 328,802	As-W Fn-58 Fn-43 Kx-DH Kx-16 Lg-31 Wt-3	IM-979 IM-1023 IM-188 IM-2078 IM-793 IM-246 IM-298
Oneida Sand & Gravel, Inc. P.O. Box 910 Malvern, OH 44644 330-863-0808 Rodney L. Smitley, pres.	Oneida Sand & Gravel, Inc. (47)	Carroll	sand & gravel	104,440	104,440	Cl-204	IM-554

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Osborne Materials Co. P.O. Box 248 Grand River, OH 44045-0248 440-357-5562 Harold T. Larned, pres.	Osborne Materials Co. (2)	Lake Erie	sand & gravel	169,762	169,762	Lke-dredge	
Oster Sand & Gravel, Inc. 5947 Whipple Ave. NW North Canton, OH 44720-7692 330-494-5472 Marlene K. Oster, pres.	Malvern Plant (717) Massillon Plant (326) Mudbrook Plant (581) Oster Sand & Gravel, Inc.-Bolivar (586)	Carroll Stark Stark Tuscarawas	sand & gravel sand & gravel sand & gravel sand & gravel	 678,555 26,530 260,951	 678,555 26,530 260,951	Cl-O Sk-165 Sk-R Ts-2036	IM-2082 IM-192 IM-697 IM-1155
Ours Sand & Gravel 20444 State Route 7 S Crown City, OH 45623 740-256-1378 Donald Ours, owner	Ours Sand & Gravel (466)	Gallia	sand & gravel	4,789	4,789	Ga-O	IM-1028
P & H Construction 3745 S. Third St. Ironton, OH 45638 740-533-3030 Paul Popov, pres.	P & H Mine (182)	Lawrence	clay			Le-PH	IM-1268
Patrick Excavating, Inc. 5839 State Route 5 P.O. Box 38 Ravenna, OH 44266 330-296-7706 Tim Patrick, pres.	Patrick (745) (212)	Portage	sand & gravel clay	 2,186	 2,186	Pe-P	IM-1322
R. H. Penick Co. 1504 Blue Jay Rd. Heath, OH 43056-1767 740-323-3040 R. H. Penick, owner	R. H. Penick Co.(3)	Licking	salt	6,144	6,144	Lg-45	
Phillips Sand & Gravel P.O. Box 187 Alpha, OH 45301 937-426-5461 Richard Phillips, II, pres.	Phillips Sand & Gravel (115)	Greene	sand & gravel	361,204	361,204	Ge-36	IM-305
Pine Grove Regional Facility 5131 Drinkle Rd. Amanda, OH 43102 740-969-4487 Tony Furgiuele, pres.	Pine Grove Regional Facility (83) (234)	Fairfield	sandstone clay	27,000 33,335	27,000 33,335	Fd-PG	IM-2086
Piqua Materials, Inc. Piqua Minerals Division 1750 W. Statler Rd. Piqua, OH 45356 937-773-4824 Albert Donovan, mgr.	Piqua Minerals Division (64)	Miami	limestone	772,357	910,699	Mi-1	IM-382
Pleasant Valley Limestone 12321 Ideal Rd. Byesville, OH 43723 740-685-6726 George V. Thompson, pres.	Thompson Mining/ Pleasant Valley Stone (185)	Muskingum	limestone	129,618	129,618	Mum-907	IM-1200
C. F. Poeppelman, Inc. 4755 N. State Route 721 Bradford, OH 45308 937-448-2191 James C. Poeppelman, pres.	C. F. Poeppelman, Inc. (67)	Miami	limestone	408,768	408,768	Mi-10	IM-335

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Power Development Corp. P.O. Box 936 Malvern, OH 44644 330-863-0603 Paul W. Robertson, pres.	Power Development Corp. (703)	Carroll	sand & gravel	1,430	1,430	Cl-PD	IM-1352
Prairie Lane Sand & Gravel Co. 3001 Prairie Lane Rd. P.O. Box 233 Wooster, OH 44691 330-262-6821 Ralph W. Miller, pres.	Prairie Lane Sand & Gravel Co. (372) (179)	Wayne	sand & gravel clay	211,707	209,842	We-11	IM-547
Precision Aggregate, Inc. 12205 E. Gypsy Lane Rd. Bowling Green, OH 43402 419-352-4681 Randolph Schmeltz, pres.	Precision Aggregate II (183) (666) Precision Aggregate I (379)	Wood Wyandot	limestone sand & gravel sand & gravel	221,000 33,260 88,470	221,000 33,260 88,470	Wd-14 Wt-4	IM-1157 IM-520
Precision Aggregates III, LLC 100 Stone St. Fremont, OH 43240 419-352-4681 Randolph G. Schmeltz, pres.	Precision Aggregates III, LLC (101) (768)	Sandusky	limestone sand & gravel	225,000 43,800	225,000 43,800	Sy-5	IM-0259
Putnam County Board of Commissioners Putnam County Courthouse 245 E. Main St., Suite 101 Ottawa, OH 45875 419-523-3656 Dennis A. Ellerbrock, pres.	Putnam County Landfill Borrow Pit (221)	Putnam	clay			Pm-P	IM-2002
Putnam Stone Co. 7053 Road M Ottawa, OH 45875-9754 419-523-6004 Tony Shroyer, pres.	Putnam Stone Co. (98)	Putnam	limestone	253,712	272,553	Pm-2	IM-570
Quality Ready Mix, Inc. 12201 Fryburg Rd. Wapakoneta, OH 45895 419-738-2817 Robert E. Hirschfeld, pres.	Quality Ready Mix, Inc. (25)	Auglaize	sand & gravel	32,603	32,603	Ae-16	IM-595
Quality Stone Co. 8751 North State Route 7 Cheshire, OH 45620 740-992-6637 Jay Hall, Jr., pres.	Quality Stone Co. (148) Route 32 (182)	Vinton Vinton	limestone limestone	 531,287	 531,287	Vn-190 Vn-193	D-0761
The Quarry, LLC 1700 Lyons Rd. Dayton, OH 45458 937-435-8584 Sherry Oakes, pres.	The Quarry (226)	Greene	limestone	820	820	Ge-Q	IM-2090
Quarry Trails 7500 S. Cassel Rd. P.O. Box 520 Vandalia, OH 45377 937-890-1141 John E. Moyer, Sr., pres.	Quarry Trails (178)	Montgomery	limestone			My-Q	IM-860
R. & S., Inc. 7522 Wales Rd. NW North Canton, OH 44720 330-499-1024 Gary A. Ross, pres.	Copley Sand & Gravel (427)	Summit	sand & gravel			St-54	IM-934

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
R. L., Ltd. 5850 Dryfork Rd. Cleves, OH 45002 513-367-5700 Rick Ashcraft, v. pres.	R. L., Ltd. (137)	Hamilton	sand & gravel	2,867	2,867	Hmn-67	IM-529
Rack Sand, Inc. 5175 Este Ave. Cincinnati, OH 45232 513-242-5052 Roy Schweitzer, owner	Rack Sand, Inc. (139)	Hamilton	sand & gravel			Hmn-10	IM-226
Rainbow Sand & Gravel, Inc. P.O. Box 240 Bristol, OH 44402 330-889-9400 Rex King, pres.	Rainbow Sand & Gravel, Inc. (280)	Portage	sand & gravel	119,971	119,971	Pe-64	IM-1017
Red Brush Peat Co. 6945 Red Brush Rd. Ravenna, OH 44266 330-297-0923 Barbara H. Linger, owner	Red Brush Peat Co. (482) (116) (9)	Portage	sand & gravel clay peat	47	47	Pe-61	IM-1064
Redskin Transport LLC 6824 Mt. Vernon Rd. Newark, OH 43055 740-745-5965 Rock Van Wey, pres.	Sleepy Hollow Pit (658)	Licking	sand & gravel			Lg-S-1	IM-1281
Richards Service Garage 2170 Wilberforce-Clifton Rd. Xenia, OH 45385 937-372-8263 Roger Richards, owner	Richards Service Garage (547)	Greene	sand & gravel			Ge-R	IM-829
Richland Moulded Brick Co. 1000 Richland Shale Rd. P.O. Box 1711 Mansfield, OH 44901 419-524-0000 Dudley P. Frame, Jr., pres.	Richland Moulded Brick Co. (114)	Richland	shale	15,189	15,189	Rd-R	IM-1035
Ridge Township Quarry 16905 Middlepoint Rd. Van Wert, OH 45891 419-238-2533 Jenny Lautenschleger, foreman	Ridge Township Quarry (122)	Van Wert	limestone	67,179	67,179	Vt-7	IM-642
Riverside Sand & Gravel Co., Inc. P.O. Box 324 Tallmadge, OH 44278-0324 330-673-2021 Albert H. Acken, Jr., pres.	Riverside Sand & Gravel Co., Inc. (333) (49)	Summit	sand & gravel sandstone	20,298 3,196	20,298 3,196	St-24	IM-239
Gary Roberts Excavating 570 Derby Downs Rd. Newark, OH 43055 740-763-3206 Gary L. Roberts, owner	Gary Roberts Excavating (419)	Licking	sand & gravel	2,150	2,150	Lg-504	IM-991
Rockwell Sand & Gravel, Inc. 8300 State Route 14 Streetsboro, OH 44241 330-626-5577 Roger Schuck, pres.	Rockwell Sand & Gravel, Inc. (273) Ruefner (739)	Portage Portage	sand & gravel sand & gravel	257,604	257,604	Pe-85 Pe-R	IM-700 IM-2037
Dale B. Rohr 10794 Strusser St. NW Canal Fulton, OH 44614 330-854-4004 Dale B. Rohr, pres.	D. & C. Rohr (759)	Stark	sand & gravel			Sk-RO	IM-2084

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Roy M. Roush 11278 Darby Creek Rd. Orient, OH 43146 614-877-4792 Roy M. Roush, owner	R Farm S & G (736)	Pickaway	sand & gravel	927	1,000	Pky-RR	IM-2040
Rubel Quarry, Inc. 35479 State Route 78 Lewisville, OH 43754 740-567-3217 Randy Rubel, pres.	Rubel Quarry, Inc. (164)	Monroe	limestone			Me-509	IM-1094
Rumpke Mountain Mining Co. 10795 Hughes Rd. Cincinnati, OH 45251 513-851-0122 William J. Rumpke, pres.	Rumpke Mountain Mining Co. (190) (190)	Hamilton	clay shale	430,201	430,201	Hmn-72	IM-1264
Rumpke Waste, Inc. 9427 Beyers Rd. Georgetown, OH 45121 513-851-0122 William Rumpke, pres.	Rumpke Waste, Inc. (227) (227)	Brown	clay shale	51,161 49,113	51,161 49,113	Bn-W	IM-2076
Rupp Construction, Inc. 18228 Fulton Rd. Marshallville, OH 44645 330-855-2781 Gary D. Radabaugh, pres.	Rupp Construction, Inc. (373)	Wayne	sand & gravel	249,456	249,456	We-7	IM-471
S & S Aggregate, Inc. P.O. Box 1585 Zanesville, OH 43702-1585 740-453-0721 Richard A. McClelland, v. pres.	Plant #6 (101) Twin Lakes-S & S Ag #10 (282) Twin Lakes-S & S Agg. #11 (281) S & S Agg #14 (292) Twin Lakes-S & S Agg #9 (336)	Franklin Portage Portage Richland Summit	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel	 6,573 539,073 65,360	 6,573 585,491 66,879	Fn-24 Pe-67 Pe-59 Rd-5 St-44	IM-266 IM-202 IM-210 IM-470 IM-178
Samco, Inc. 10217 State Route 534 N Middlefield, OH 44062 440-272-5158 J. Jim Holmes, pres.	Springbrook (340) (77) (184)	Trumbull	sand & gravel sandstone shale	271,445 525 25,000	271,445 525 25,000	Tl-12	IM-131
Sandco, Inc. P.O. Box 351145 Toledo, OH 43635 419-875-6969 Raymond Cordray, pres.	SANDO Sand & Topsoil (672)	Fulton	sand & gravel			Ftn-SI	IM-1308
Sandkuhl Clay Works, Inc. 05536 Kossuth-Amanda Rd. Spencerville, OH 45887 419-647-2905 Leslie E. Sandkuhl, pres.	Sandkuhl Clay Works, Inc. (2)	Auglaize	clay	5,554	5,554	Ae-7	
Sandman Trucking, Inc. 9025 Old Airport Hwy. Holland, OH 43528 419-865-1666 Shaun Parker, pres.	Sandman Trucking, Inc. (678) Sandman Trucking, Inc. (751) Sandman Trucking, Inc. (708) Sandman Trucking, Inc. (733)	Fulton Fulton Lucas Lucas	sand & gravel sand & gravel sand & gravel sand & gravel	169,861	169,861	Ftn-SA Ftn-SA1 Ls-ST Ls-ST1	IM-1335 IM-2136 IM-2001 IM-2060
Guy Schieve P.O. Box 83 Birmingham, OH 44816 440-965-8792 Guy Schieve, owner	Guy Schieve Pit (191)	Lorain	sand & gravel	9,100	9,100	Ln-12	IM-731
E. H. Schilling & Sons, Inc. 1154 TR 1117 Ironton, OH 45638 740-532-8463 Earl H. Schilling, pres.	E. H. Schilling & Sons, Inc. (305)	Scioto	sand & gravel			So-78	

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Schloss Materials Co. 13700 McCracken Rd. Cleveland, OH 44125 216-587-4900 Raymond E. Schloss, Jr., pres.	Schloss Materials Co. (274) Schloss Materials Co. (569)	Portage Portage	sand & gravel sand & gravel	186,892	186,892	Pe-60 Pe-SM	IM-78 IM-499
Schrader and Son, Inc. 15317 Beaver Pike Jackson, OH 45640 740-286-0258 Jeffrey L. Schrader, pres.	Schrader & Son, Inc. (82)	Pike	sandstone	33,327	33,327	Pke-S	IM-1348
Roy B. Schweitzer dba The Gravel Co. 325 Clark Rd. P.O. Box 15501 Cincinnati, OH 45215 513-761-4980 Roy B. Schweitzer, pres.	New Miami Pit (42) Cleves (141)	Butler Hamilton	sand & gravel sand & gravel			Br-3 Hmn-28	IM-719 IM-353
Mark E. Scott P.O. Box 6112 Chillicothe, OH 45601 740-772-4990 Mark E. Scott, owner	Scott Pit (575)	Ross	sand & gravel	30,000	30,000	Rs-P	IM-122
Seaway Sand & Stone, Inc. 11330 Airport Hwy. Swanton, OH 43558 419-865-5751 Brent Gerken, pres.	Seaway Sand & Stone, Inc. (188) (195) (156) (156)	Lucas	limestone sand & gravel clay shale	293,616 52,658	293,616 52,658	Ls-13	IM-492
Seville Sand & Gravel, Inc. 8215 Seville Rd. Lodi, OH 44254 330-948-1812 George D. Cross, pres.	Seville Sand & Gravel, Inc. (206)	Medina	sand & gravel	193,615	193,615	Ma-22	IM-425, IM-442, IM-650, IM-651
Betty Sewell and Rebecca Johnson 3403 U.S. Route 68 South Bellefontaine, OH 43311 740-922-3942 Mary J. Brown, pres.	Sewell and Johnson (730)	Logan	sand & gravel			Lgn-J	IM-2053
Shady Bend Sand & Gravel 550 Pleasant Valley Rd. NW P.O. Box 336 Sugarcreek, OH 44681 330-852-4440 Daniel O. Miller, owner	Shady Bend Sand & Gravel (72)	Coshocton	sand & gravel	155,302	155,302	Cn-624	IM-243
Shamrock Materials, Inc. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	Shamrock (38)	Butler	sand & gravel	613,469	616,758	Br-52	IM-814
Sharon Stone Co. P.O. Box 100 Dexter City, OH 45727 740-989-2290 David Skinner, pres.	Sharon Stone Co. (167) (197) Belpre Sand & Gravel (713)	Noble Washington	limestone clay sand & gravel	128,357 40,402	128,357 50,000	Ne-S Wn-SS	IM-913 IM-2006
Shelly Materials, Inc. 80 Park Dr. P.O. Box 266 Thornville, OH 43076 740-246-6315 Mark Shelly, pres.	Springfield Plant #3 (58) Coshocton Plant #5 (71) Lancaster Plant #14 (92) Belle Center Plant #8 (51) Racine Plant #6 (212) Dresden Plant #9 (244)	Clark Coshocton Fairfield Logan Meigs Muskingum	sand & gravel sand & gravel sand & gravel limestone sand & gravel sand & gravel	181,288 184,423 908,294 433,467 290,898 488,624	181,288 184,423 908,294 433,467 290,898 488,624	Ck-25 Cn-694 Fd-13 Lgn-2 Ms-298 Mum-799	IM-358 IM-293 IM-848, IM-1331 IM-494 IM-32 IM-317, IM-264

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Shelly Materials, Inc. (cont.)	Chillicothe Plant #21 (490)	Ross	sand & gravel	222,287	222,287	Rs-27	IM-1098
	Ostrander Plant #10 (120)	Union	limestone	2,140,031	2,140,031	Un-2	IM-236
	York Center #11 (119)	Union	limestone	360,944	360,944	Un-1	IM-208
Shelly Materials, Inc. 1558 CR 105 Belle Center, OH 43310 937-464-3833 Mark Shelly, pres.	Tri-County Limestone Co. (61)	Marion	limestone	193,319	193,319	Mn-1	IM-250
Shelly Materials, Inc. 12484 State Route 701 Kenton, OH 43326 937-464-3833 Mark Shelly, pres.	Hardin Quarry (38)	Hardin	limestone	180,910	210,000	Hdn-2	IM-443
Sidco Development, Inc. 4620 Limestone Valley Rd. Zanesville, OH 43701 740-849-2394 Jeffrey R. Sidwell, pres.	Columbia Cement (203)	Muskingum	limestone			Mum-SD	IM-1313
	Midvale Sand & Gravel (214)	Tuscarawas	limestone	1,189		Ts-S2	IM-1356
	(712)		sand & gravel	289,488	309,229		
R. W. Sidley, Inc. 615 W. Main St. Conneaut, OH 44030 440-352-9343 Robert Buescher, pres.	Sidley-Kingsville Pit (15)	Ashtabula	sand & gravel	145,000	155,000	Asa-15	IM-783
R. W. Sidley, Inc. 7123 Madison Rd. Thompson, OH 44086 440-352-9343 Robert Buescher, pres.	Hambden Pit (58)	Geauga	sandstone	450	450	Gea-S	IM-161
	Thompson Pit (18)	Geauga	sandstone	120,000	150,000	Gea-1	IM-163
	Painesville Plant (166)	Lake	sand & gravel	5,000	5,000	Lke-7	IM-162
Sidney Sand & Gravel Co. 1120 Milligan Ct., Suite 104 Sidney, OH 45365 937-492-5412 Thomas P. Milligan, pres.	Wagner Pit (493)	Shelby	sand & gravel			Shy-S	IM-1005
Sidwell Materials, Inc. 4620 Limestone Valley Rd. Zanesville, OH 43701 740-849-2392 Jeffrey R. Sidwell, pres.	Bellaire Stone (152)	Belmont	limestone	228,623	228,623	Bt-1190	IM-1089
	(56)		sandstone	10,219	10,219		
	(105)		clay				
	(105)		shale	171	171		
	Northshore Limestone (201)	Belmont	limestone			Bt-B	D-998
	Uniontown Stone (195)	Belmont	limestone	134,159	134,159	Bt-N	IM-1283
	Dupler/Ford (186)	Muskingum	limestone	325,639	325,639	Mum-SB	IM-1212, IM-1269
	Sidwell Materials, Inc. (229)	Muskingum	limestone			Mum-SW	IM-2092
	White Cottage (78)	Muskingum	limestone	554,466	554,466	Mum-104	IM-277
Joe Simak & Sons Trucking, Inc. 3052 E. Center St. P.O. Box 599 North Kingsville, OH 44068 440-224-1992 Joseph E. Simak, pres.	Amboy Pit (677)	Ashtabula	sand & gravel	7,632	7,632	Asa-ST	IM-1349
	Baird Pit (701)	Ashtabula	sand & gravel			Asa-JS	IM-1360
	Basen Pit (715)	Ashtabula	sand & gravel	16,522	16,522	Asa-ST1	IM-2023
	North Ridge Pit (413)	Ashtabula	sand & gravel	26,167	26,167	Asa-18	IM-949
	(166)		clay	9,505	9,505		
Small's Sand & Gravel, Inc. P.O. Box 617 Gambier, OH 43022 740-427-3677 Michael W. Small, pres.	Small's Sand & Gravel, Inc. (707)	Knox	sand & gravel	87,358	87,358	Kx-S	IM-2000
	Small's Sand & Gravel, Inc. (162)	Knox	sand & gravel	39,460	39,460	Kx-5	IM-884, IM-1307
	Small's Sand & Gravel, Inc. (165)	Knox	sand & gravel	223,554	223,554	Kx-15	IM-967
	Small's Sand & Gravel, Inc. (408)	Knox	sand & gravel	3,213	3,213	Kx-17	IM-968
Sober Sand & Gravel Co. 2898 Tallmadge Rd. Ravenna, OH 44266 330-325-7088 Tracy Sober, pres.	Sober Sand & Gravel Co. (275)	Portage	sand & gravel	30,566	30,566	Pe-18	IM-193
	(211)		clay				

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Soehnlen Bros. Sand & Gravel, Inc. 10449 Soehnlen Rd. NW Beach City, OH 44608 330-756-2244 Francis L. Soehlen, pres.	Soehnlen Bros. Sand & Gravel, Inc. (343)	Tuscarawas	sand & gravel	133,365	133,365	Ts-1826	IM-88
Solomon's Mines, Inc. 7732 Salem-Unity Rd. Salem, OH 44460 330-337-0123 Jack Solomon, owner	Solomon's Mines, Inc. (636) (72) (194) Solomon's Mines #1 (196) (135)	Columbiana Mahoning	sand & gravel sandstone clay sand & gravel clay	118,783 27,974	118,783 27,974	Ca-S Mg-632	IM-1258 IM-808
Solon Excavators Sand & Gravel, Inc. 10925 Mantua Center Rd. P.O. Box 850 Mantua, OH 44255 330-274-8241 Howard Sargent, pres.	May (623) Brugman (757) Burke (276)	Geauga Portage Portage	sand & gravel sand & gravel sand & gravel	6,221 23,153 164,115	0 23,153 164,115	Gea-43 Pe-S1 Pe-36	IM-1230 IM-2126 IM-90
Soltis Sand & Gravel P.O. Box 452 Parkman, OH 44080 440-548-5813 James Soltis, owner	Soltis Sand & Gravel (415) (86)	Geauga	sand & gravel clay	5,057 728	5,057 728	Gea-9	IM-132
South Central Sand & Gravel 340 Bailey Chapel Rd. Piketon, OH 45661 740-289-2629 James A. Nier, owner	South Central Sand & Gravel (254)	Pike	sand & gravel	28,934	28,934	Pke-30	IM-786
Southdown Inc. 3250 Linebaugh Rd. Xenia, OH 45385 937-879-8380 Gilberto Perez, pres., U.S. ops.	Batdorf, Feirstine, Schneider (34) Harner (90) Miller et al. (202) (10) G-Tract (72)	Greene Greene Greene Montgomery	limestone clay limestone clay limestone	546,046 174,106 396 378,185	518,419 178,337 396 412,800	Ge-9 Ge-44 Ge-8 My-58	IM-364 IM-364 IM-330
Southern Ohio Aggregates, Inc. 11641 Mosteller Rd. Cincinnati, OH 45241 513-771-0820 James P. Jurgensen, pres.	New Miami Plant (460) E. Miami River Road (551) Kilby Road (552) Gratis Plant (284)	Butler Hamilton Hamilton Preble	sand & gravel sand & gravel sand & gravel sand & gravel	 20,526	 20,526	Br-S Hmn-S Hmn-SO Pre-7	IM-1053 IM-746 IM-720 IM-306
Speer Brothers, Inc. 3812 Old Railroad Rd. Sandusky, OH 44870 419-626-5291 David Speer, pres.	101 Location (89)	Erie	clay			Ee-32	IM-1077
Sphagnum Moss Peat Farm 9904 State Route 736 Plain City, OH 43064 937-645-5459 Mike Poling, owner	Sphagnum Moss Peat Farm (2)	Champaign	peat			Cpn-9	
Spring Creek Corp. 4723 Hardin-Wapak Rd. Sidney, OH 45365 937-492-4186 Jerry Bushelman, pres.	Morelock Pit (494)	Shelby	sand & gravel	455,000	529,000	Shy-SC	IM-1018
City of Springfield 201 Eagle City Rd. Springfield, OH 45502 937-525-5880 Jerry Swanton, water plant supt.	City of Springfield (437)	Clark	sand & gravel			Ck-7	IM-449

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Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Spring Industries, Inc. 56290 Dilles Bottom Rd. Shadyside, OH 43947 740-671-9400 Glenn Straub, pres.	Bolivar Pit (582) Midvale Pit (344)	Stark Tuscarawas	sand & gravel sand & gravel			Sk-SI Ts-1771	IM-588 IM-77
Spring Run Gravel P.O. Box 466 Killbuck, OH 44637 330-276-2444 Jeff Chaney, owner	Spring Run Gravel (416) (111)	Holmes	sand & gravel clay	13,396	13,396	Hs-96	IM-997
Stansley Mineral Resources 3810 Herr Rd. Sylvania, OH 43560 419-843-2813 Jeffrey Stansley, pres.	Ridge Quarry (196) Stansley Mineral Resources, Genoa Plant (85)	Hancock Ottawa	limestone limestone	699,300	699,300	Hk-A[6] Oa-1A[7]	IM-1299 IM-292
State Line Resources, Inc. P.O. Box 419 Negley, OH 44441 330-426-9611 James Muse, v. pres.	State Line Resources, Inc. (4)	Columbiana	clay	77,531	77,531	Ca-505	IM-13, IM-936
Stewart & Reichman, Inc. 1866 State Route 416 SE Gnadenhutten, OH 44629 740-922-0050 Timothy G. Brown, pres.	Stewart & Reichman, Inc. (722) Stewart & Reichman, Inc. (346)	Coshocton Tuscarawas	sand & gravel sand & gravel	75,101	75,101	Cn-SR Ts-111	IM-2065 IM-55
Stocker Sand & Gravel Co. P.O. Box 176 Gnadenhutten, OH 44629 740-254-4635 William E. Stocker, pres.	Stocker Sand & Gravel Co.-Gnaden (347) Stocker Sand & Gravel Co.-Island (348) Stocker Sand & Gravel Co. (760)	Tuscarawas Tuscarawas Tuscarawas	sand & gravel sand & gravel sand & gravel	578,076 521,292	578,076 521,292	Ts-69 Ts-125 Ts-ST	IM-51 IM-50 IM-2125
Stoneco, Inc. 1345 Ford St. P.O. Box 29A Maumee, OH 43537 419-893-8731 John Bearss, pres.	Maumee Quarry (54) Celina Quarry (62) Rocky Ridge Quarry (83) Auglaize Quarry (88) Scott Quarry (121) Montpelier North Pit (376) Montpelier S.-Takacs Pit (506) Montpelier South Pit (375) Lime City Quarry (131) Portage Quarry (132)	Lucas Mercer Ottawa Paulding Van Wert Williams Williams Williams Wood Wood	limestone limestone limestone limestone limestone sand & gravel sand & gravel sand & gravel limestone limestone	1,187,285 458,727 272,054 783,630 398,605 15,410 942,855 398,223	1,259,576 512,816 266,130 891,176 411,527 15,410 840,669 452,074	Ls-2 Mr-1 Oa-14 Pg-2 Vt-3 Ws-9 Ws-T Ws-6 Wd-6 Wd-11	IM-503 IM-592 IM-320 IM-481 IM-495 IM-498 IM-1022 IM-497 IM-480 IM-475
Stone Creek Brick Co. P.O. Box 116 Stone Creek, OH 43840 330-339-5511 A. C. Marsh, Jr., pres.	Stone Creek Brick Clay Mine (67) Stone Creek Brick Shale Pit (67)	Tuscarawas Tuscarawas	clay shale	38,420 5,500	38,420 5,500	Ts-1557 Ts-1558	IM-52 IM-52
Suburban South Recycling & Disposal Facility 3415 TR 447 Glenford, OH 43739 740-787-2327 Frank Fello, pres.	Suburban South Recycling & Disposal Facility (81) (213) (213)	Perry	sandstone clay shale			Py-SU	IM-1340
Suever Stone Co., Inc. Bloomlock Rd. P.O. Box 10 Delphos, OH 45833 419-692-9796 Neal Lause, pres.	Suever Stone Co., Inc. (7) Suever Stone Co., Inc. (123)	Allen Van Wert	limestone limestone	118,300 210,950	118,300 210,950	An-4 Vt-1	IM-491 IM-500

[6]This mine was operated January and February 2001 by Stansley Mineral Resources and March through December 2001 by National Lime & Stone Co.
[7]Stansley Mineral Resources and Graymont Dolime (OH), Inc., operate from the same mine.

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Summitville Tiles, Inc. P.O. Box 173 Summitville, OH 43962 330-223-1511 David Johnson, pres.	Summitville Tiles, Inc. (5)	Columbiana	shale	36,180	36,180	Ca-205	IM-74
Sunshine Sand Co. 12400 Broadway Ave. Cleveland, OH 44125 216-587-2700 Dorothy M. Strohm, pres.	Sunshine Sand Co. (528)	Portage	sand & gravel			Pe-SSC	IM-318
Swingle Drilling, Inc. 713 Keystone St. P.O. Box 220 Crooksville, OH 43731 740-982-4280 Mark B. Swingle, pres.	T.G. Enterprises (138)	Perry	clay			Py-S1	IM-1183
TCNC Industries, Inc. P.O. Box 101 N. Versailles, PA 15137 412-672-6480 Chester Winters & Tom Schwer, partners	TCNC Industries, Inc. (210)	Carroll	limestone			Cl-TC	IM-1319
Tackett Builders 906 Charleston Pike Chillicothe, OH 45601 740-772-5431 Carmel G. Tackett, owner	Tackett's Pit (606) (150)	Ross	sand & gravel clay	328	328	Rs-T	IM-1189
E. H. Taylor, Inc. 2603 Dorr St. Toledo, OH 43607 419-536-6020 Bobby J. Howard, pres.	E. H. Taylor, Inc. (709)	Lucas	sand & gravel			Ls-T	IM-2012
Taylorsville Rd. Hardfill 4252 Taylorsville Rd. Huber Heights, OH 45424 937-233-7500 James T. McDonald, pres.	Taylorsville Rd. Hardfill (236)	Montgomery	sand & gravel			My-55	IM-571
Teague Gravel Co., Inc. P.O. Box 380 Newbury, OH 44065 440-564-5677 Donald R. Teague, pres.	Teague Gravel Co., Inc. (109)	Geauga	sand & gravel	45,695	45,695	Gea-35	IM-321
Thiel Construction Co. P.O. Box 225 Blakeslee, OH 43505 419-272-2712 Lee R. Thiel, pres.	Thiel Construction Co. (633)	Williams	sand & gravel	2,494	2,494	Ws-21	IM-1225
Thomas Sand & Gravel P.O. Box 171 Gratis, OH 45330 937-787-4677 Howard Thomas, owner	Thomas Sand & Gravel (741)	Preble	sand & gravel	140	680	Pre-T	IM-2036
Don Thompson Excavating, Inc. 1471 W. Paintersville Rd. Spring Valley, OH 45370 937-862-7911 Todd Thompson, pres.	Don Thompson Excavating, Inc. (546)	Greene	sand & gravel			Ge-46	IM-1149

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Tipp Stone Co., Inc. P.O. Box 367 Troy, OH 45373 937-890-4051 Michael Eidemiller, v. pres.	Tipp Stone Co., Inc. (446) Tipp Stone Co., Inc. (238)	Miami Montgomery	sand & gravel sand & gravel	42,742 79,347	42,742 79,347	Mi-12 My-61	IM-467 IM-468
Towne Square Products 156 E. Broadway Westerville, OH 43081 614-781-6990 Suzanne Edgar, pres.	Towne Square Products (41)	Noble	shale	160	160	Ne-66	IM-664
Tri-State Asphalt Products 56290 Dilles Bottom Rd. Shadyside, OH 43947 740-671-9400 Glenn Straub, pres.	Tri-State Asphalt Products (26)	Belmont	sand & gravel			Bt-74	IM-288
Trout Sand & Gravel Co. Route 4 Marietta, OH 45750 740-373-7471 Henry C. Trout, Jr., owner	Trout Sand & Gravel Co. (369)	Washington	sand & gravel	18,685	35,472	Wn-510	IM-25
Tuffco Sand & Gravel, Inc. P.O. Box 399 Marysville, OH 43040 614-873-3977 Charles Lewis, pres.	Tuffco Sand & Gravel, Inc. (474) (207)	Madison	sand & gravel clay	187,229 32	187,500 32	Mdn-11	IM-1063
Twinsburg Development Corp. P.O. Box 248 Grand River, OH 44045 440-357-5562 Harold T. Larned, pres.	Twinsburg Development Corp.(260) (204)	Portage	sand & gravel clay	215,148	265,541	Pe-84	IM-868
U.S. Aggregates, Inc. 5400 W. 86th St. P.O. Box 68123 Indianapolis, IN 46268 317-872-6010 James Fehsenfeld, pres.	U.S. Aggregates/Richmond Plant (571)	Preble	sand & gravel	52,500	0	Pre-AAC	IM-779
U.S. Silica Co. P.O. Box 146 Dundee, OH 44624 800-243-7500 Rick Shearer, pres.	Dundee Mine (42)	Tuscarawas	sandstone	12,750	15,000	Ts-1660	IM-68
United Aggregates, Inc. P.O. Box 750 Mt. Vernon, OH 43050 740-397-0000 John D. Ellis, pres.	United Aggregates, Inc. (163)	Knox	sand & gravel	223,905	168,707	Kx-3	IM-300
Valley Brook Sand & Gravel, Inc. 3967 State Route 303 Mantua, OH 44255 330-297-1325 Frank Ruehr, pres.	Ruehr (740)	Portage	sand & gravel			Pe-V	IM-2061
Valley Clay Mining Co. 7052 Rosehill Rd. Roseville, OH 43777 740-697-0620 Steve McCann, pres.	Spring Mine (122) Tague Mine (173)	Muskingum Perry	clay clay	16,027 1,440	16,027 1,440	Mum-904 Py-V	IM-1127 IM-1245
Valley Materials Co. 4947 U.S. Route 23 S P.O. Box 400 Piketon, OH 45661 740-289-4551 Ralph McFann, pres.	Valley Materials #1 (252) (99) Valley Materials #2 (694)	Pike Pike	sand & gravel clay sand & gravel	71,858 8,112	34,801 8,112	Pke-26 Pke-V	IM-142 IM-1330

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Van Wey Sand & Gravel, Inc. 6824 Mt. Vernon Rd. NE Newark, OH 43055 740-745-5965 Rock Van Wey, pres.	Van Wey Sand & Gravel, Inc. (179)	Licking	sand & gravel	839,580	860,000	Lg-10	IM-217
Ralph Wagner & Sons 7317 Brinker St. Navarre, OH 44662 330-495-7414 Michael Wagner, owner	Wagner & Sons (579)	Stark	sand & gravel			Sk-W	IM-867
Wagner Quarries Co. 4203 Milan Rd. Sandusky, OH 44870 419-625-8141 Martin A. Jones, pres.	Wagner Quarries Co. (26)	Erie	limestone	2,985,826	3,158,671	Ee-1	IM-310
Walcottville Sand & Gravel Corp. 1345 Ford St. Maumee, OH 43537 419-873-8731 John T. Bearss, pres.	London Aggregates-Enon Pit (634)	Williams	sand & gravel	107,173	128,156	Ws-22	IM-1222
Walhonding Sand & Gravel 27679 State Route 206 Walhonding, OH 43843 740-824-5251 Tim Helmick, pres	Walhonding Valley Sand & Gravel (749) (233)	Coshocton	sand & gravel shale	1,627 561	1,627 561	Cn-WL	IM-2127
Wallace Road Sand & Gravel P.O. Box 276 Petersburg, OH 44454 330-542-9397 David Sugar, pres.	Wallace Road Sand & Gravel (475)	Mahoning	sand & gravel	1,380	1,380	Mg-630	IM-1091
Waller Bros. Stone Co. P.O. Box 157 McDermott, OH 45652 740-259-2356 F. L. Waller, pres.	Crabtree Quarry (37) Inskeep Quarry (36) Miller Quarry (38) New Inskeep (85)	Scioto Scioto Scioto Scioto	sandstone sandstone sandstone sandstone	7,985 5,455	7,985 5,455	So-76 So-48 So-82 So-W	IM-141 IM-140 IM-158 IM-2111
Carl Walter 11098 Bower Rd. Minerva, OH 44657 330-894-2315 Carl Walter, owner	Carl Walter (653)	Columbiana	sand & gravel	2,600	2,600	Ca-W	IM-1279
Ward Materials, Inc. 385 Oak St. R.R. 2 Leipsic, OH 45856 419-943-2450 Arnold W. Rosebrock, pres.	Ward Materials, Inc. (714)	Allen	sand & gravel	33,482	36,232	An-W	IM-2069
Don Wartko Construction, Inc. 975 Tallmadge Rd. Kent, OH 44240 330-673-5252 Thomas Wartko, pres.	Don Wartko Construction, Inc. (483)	Portage	sand & gravel			Pe-92	IM-522
Waste Management/Chambers Development of Ohio, Inc. 19469 County Road 7 Coshocton, OH 43812 740-787-2327 W. David Gallagher, pres.	Harrison County Landfill (188)	Harrison	clay			Hn-CD	D-1105
Waterland Trucking Service, Inc. P.O. Box 930335 Wixom, MI 48393-0335 248-349-1582 Richard D. Massuch, pres	Adams County Quarry (173)	Adams	limestone			Ads-H	IM-805

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Waterloo Coal Co., Inc. P.O. Box 626 Jackson, OH 45640 740-682-7787 T. L. Darlington, Jr., pres.	Diamond Stone (9) (128) Waterloo Coal Stone Plant-Zoar Mill (47) (764) (23)	Athens Jackson 	limestone clay limestone sand & gravel clay	279,244 209,577 7,494 3,116	279,244 209,577 7,494 3,116	As-533 Jkn-367 	IM-17 D-594, D-968, D-1083
Watson Gravel, Inc. 2728 Hamilton-Cleves Rd. P.O. Box 277 Ross, OH 45061 513-863-0070 Ronald E. Watson, pres.	River Pit (667) Watson Pit (44) Campbell Rd. (407) Dry Fork (131) Harrison #2 (640) Harrison Pit (142)	Butler Butler Hamilton Hamilton Hamilton Hamilton	sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel sand & gravel	27,136 1,076,894 650 1,071,747	27,136 1,076,894 650 1,071,747	Br-57 Br-47 Hmn-69 Hmn-68 Hmn-ARH Hmn-60	 IM-111 IM-969 IM-747 IM-1273 IM-761
Weber Sand & Gravel, Inc. 14586 US 127 EW Bryan, OH 43506 419-636-7920 Thomas G. Weber, pres.	Weber Sand & Gravel, Inc. (377)	Williams	sand & gravel	234,552	234,552	Ws-11	IM-509, IM-661
Joann O. Weddle 2419 U.S. Route 68 N Yellow Springs, OH 45387 937-374-1290 Joann Weddle, owner	Weddle Gravel (549) (219)	Greene	sand & gravel clay	29,487 89,558	29,487 89,558	Ge-W	IM-645
Weidle Sand & Gravel, Inc. P.O. Box 247 Germantown, OH 45327 937-855-2228 Ron Weidle, Sr., pres.	Weidle Sand & Gravel, Inc. (158) (158)	Montgomery	clay shale			My-W	IM-1207
Welch Sand & Gravel, Inc. 10217 Columbia St. Harrison, OH 45030-9751 513-353-3220 Charles H. Welch, pres.	Schlichter Pit (45) East Miami Pit (144) Fernald Pit (143)	Butler Hamilton Hamilton	sand & gravel sand & gravel sand & gravel	226,477 396,092 569,753	226,477 396,092 569,753	Br-38 Hmn-48 Hmn-42	IM-218 IM-220 IM-823
White Rock Quarry, LLC Div. of U.S. Aggregates P.O. Box 119 Clay Center, OH 43408-0119 419-855-8388 Jim Fehsenfeld, pres.	White Rock Quarry (82)	Ottawa	limestone	1,172,082	1,226,446	Oa-6	IM-296
Mark Williams Blacktop Co., Inc. Route 4 Box 34 Marietta, OH 45750 740-373-2457 Mark Williams, pres.	Williams Pit #1 (534) Williams Pit #2 (504)	Washington Washington	sand & gravel sand & gravel			Wn-1009 Wn-1007	IM-525 IM-1042
Willowbrook Sand & Gravel 39130 Brookfield St. P.O. Box 304 Lisbon, OH 44432 330-424-0742 Ray Perrino, owner	Willowbrook Sand & Gravel (538)	Columbiana	sand & gravel	34,911	34,911	Ca-993	IM-1180
Gene T. Wilson P.O. Box 46 Mt. Sterling, OH 43143 740-869-4406 Eugene T. Wilson, owner	Gene T. Wilson (565)	Pickaway	sand & gravel	928	928	Pky-W	IM-1176
Dennis Winzeler 920 Center St. Bryan, OH 43506 419-636-4285 Dennis & Polly Winzeler, owners	Dennis Winzeler (378)	Williams	sand & gravel			Ws-14	IM-614

2001 OHIO ALPHABETICAL DIRECTORY OF INDUSTRIAL-MINERAL MINE OPERATORS (cont.)

Name, address, telephone number, and president/owner/ manager of company	Name of mine (and map location number)	County	Commodity	2001 sales (tons)	2001 production (tons)	State mine number	Mining and reclamation permit number
Wise Gravel 8535 W. Klinger Rd. Covington, OH 45318 937-473-3246 John A. Wise, owner	Wise Gravel (221)	Miami	sand & gravel			Mi-9	IM-408
Wyandot Dolomite, Inc. P.O. Box 99 Carey, OH 43316-0126 419-396-7641 David J. Wolfe, pres.	Wyandot Dolomite, Inc. (135)	Wyandot	limestone	1,628,451	1,938,136	Wt-8	IM-273
Wylie and Sons Landscaping 2550 County Rd. E-F P.O. Box 29 Swanton, OH 43558 419-826-1200 Thomas Wylie, owner	R. K. Walters (696) Keifer (754)	Fulton Lucas	sand & gravel sand & gravel			Ftn-W Ls-W	IM-2118 IM-2098
Wysong Gravel Co. P.O. Box 5 West Alexandria, OH 45381 937-962-2559 John & Carroll Wysong, owners	Wysong Gravel Co. (285) Wysong Gravel Co. (286)	Preble Preble	sand & gravel sand & gravel	252,524 84,589	252,524 84,589	Pre-4 Pre-6	IM-477 IM-478
Wysong Stone Co. 5897 State Route 503 N P.O. Box 159 Lewisburg, OH 45338 937-962-2559 Carroll E. Wysong, v. pres.	Wysong Stone Co. (95)	Preble	limestone	111,296	113,000	Pre-5	IM-447
X L Sand & Gravel P.O. Box 255 Negley, OH 44441 330-426-9876 Robert A. Lansberry, pres.	X L Sand & Gravel (68) X L Sand & Gravel (705)	Columbiana Columbiana	sand & gravel sand & gravel	58,197	58,197	Ca-881 Ca-XL	IM-611 IM-1347
Xenia Sand, Gravel, & Asphalt Co. 588 Dayton-Xenia Rd. Xenia, OH 45385 937-372-2978 David A. Thompson, owner	Xenia Sand & Gravel Co. (117)	Greene	sand & gravel			Ge-10	IM-518
Young's Sand & Gravel Co. P.O. Box 117 Loudonville, OH 44842 419-994-3040 Bill Heichel, pres.	Young's Sand Gravel Co. (8) Ayers (412) Chuck Spreng (616)	Ashland Ashland Ashland	sand & gravel sand & gravel sand & gravel	319,628 7,793 1,231,360	319,628 7,793 1,231,360	Ald-7 Ald-15 Ald-Y	IM-392 IM-944 IM-1216
Zerger's Quarry 100 N. Sycamore St. Woodsfield, OH 43793 740-472-1675 Herman Zerger, owner	Zerger's Quarry (80)	Noble	limestone			Ne-86	IM-70
Zoar Mining Co. P.O. Box 667 Zoar, OH 44697-0667 330-223-1511 David W. Johnson, pres.	Zoar Mine (71)	Tuscarawas	clay			Ts-540	IM-28
Zollinger Sand & Gravel Co. 11899 Easton Rd. Rittman, OH 44270 330-855-2464 Carl Zollinger, pres.	Zollinger Sand & Gravel Co. (374) (193)	Wayne	sand & gravel clay	82,996	82,996	We-15	IM-398

2001 LIMESTONE/DOLOMITE COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)	Company	No. of operations	Sales (tons)	Production (tons)
Ayers Limestone Quarry, Inc.	1	87,334	87,334	Miami River Stone Co.	3	568,909	558,438
Barrett Paving Materials, Inc.	5	1,355,873	1,308,529	Millersville Lime Inc.	1	524,636	422,790
Belden Brick Co.	3	41,061	41,061	Morrow Gravel Co.	1	146,631	254,536
Bluffton Stone Co.	1	351,473	429,790	National Lime & Stone Co.	8	13,640,000	13,640,000
Carmeuse Ohio Inc.	1	3,255,464	3,255,464	North Shore Stone Quarries, Inc.	1	4,489	4,489
Chesterhill Stone Co.	1	956,786	940,643	Ohio Asphaltic Limestone Corp.	1	482,490	482,490
Christman Quarry	1	65,174	65,174	Olen Corp.	2	904,392	904,392
Con-Ag, Inc.	1	253,185	182,184	Piqua Materials, Inc.	1	772,357	910,699
Custar Stone Co.	1	434,249	429,270	Pleasant Valley Limestone	1	129,618	129,618
Demmy Construction, Inc.	1	20,823	20,823	C. F. Poeppelman, Inc.	1	408,768	408,768
C. E. Duff & Son, Inc.	2	433,907	433,907	Precision Aggregate, Inc.	1	221,000	221,000
ENZ, Inc.	1	207,237	207,237	Precision Aggregates III, LLC	1	225,000	225,000
ESSROC Cement Corp.	2	565,274	565,274	Putnam Stone Co.	1	253,712	272,553
East Fairfield Coal Co.	1	1,005,904	1,019,318	Quality Stone Co.	1	531,287	531,287
Erie Blacktop, Inc.	1	181,997	181,997	The Quarry, LLC	1	820	820
Fox Stone Products, Inc.	1	2,500	3,200	Ridge Township Quarry	1	67,179	67,179
Graymont Dolime (OH) Inc.	1	1,317,104	1,460,293	Seaway Sand & Stone, Inc.	1	293,616	293,616
J. M. Hamilton & Sons Co., Inc.	1	22,287	22,287	Sharon Stone Co.	1	128,357	128,357
Hanson Aggregates Davon, Inc.	3	3,942,243	4,042,450	Shelly Materials, Inc.	5	3,308,671	3,337,761
Hanson Aggregates Midwest, Inc.	6	7,515,469	7,094,456	Sidco Development, Inc.	1	1,189	0
Honey Creek Stone Co.	1	304,191	328,958	Sidwell Materials, Inc.	4	1,242,887	1,242,887
K.C.C.I.	1	112,617	112,617	Southdown Inc.	3	1,098,337	1,109,556
Kellstone, Inc.	1	931,985	931,985	Stansley Mineral Resources[1]	1	699,300	699,300
Kimble Clay & Limestone Co.	1	39,338	39,338	Stoneco, Inc.	7	4,441,379	4,633,968
King Limestone, Inc.	1	304,176	304,176	Suever Stone Co., Inc.	2	329,250	329,250
King Quarries, Inc.	1	77,820	77,820	Wagner Quarries Co.	1	2,985,826	3,158,671
Lafarge Corp.	1	757,115	763,115	Waterloo Coal Co., Inc.	2	488,821	488,821
Lafarge North America	2	3,491,921	4,274,709	White Rock Quarry, LLC	1	1,172,082	1,226,446
Latham Limestone, Inc.	1	284,125	285,000	Wyandot Dolomite, Inc.	1	1,628,451	1,938,136
MacRitchie Materials, Inc.	1	308,013	421,353	Wysong Stone Co.	1	111,296	113,000
Marshall Quarry, Inc.	1	473	473	TOTAL: 65 companies	121	80,998,236	81,944,288
Martin Marietta Aggregates	10	10,086,529	9,332,256				
Martin Marietta Magnesia Specialties, Inc.	1	2,459,555	2,649,953				
Maxville Quarries, Inc.	2	165,572	165,572				
The Melvin Stone Co., LLC	4	2,848,712	2,732,444				

[1]Stansley Mineral Resources operates in the same mine as Graymont Dolime (OH) Inc.; this mine is not counted in total mines.

2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Cn-A).

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Adams	Hanson Aggregates Davon, Inc.	Plum Run Stone	Meigs	Peebles, Greenfield & Tymochtee Dolomites (Silurian)	crushed stone—unspecified	Ads-1
Allen	Bluffton Stone Co.	Bluffton Stone Co.	Richland	Tymochtee Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone, aglime	An-1
	National Lime & Stone Co.	Lima Plant	Bath	Silurian	crushed stone—portland cement concrete, railroad ballast, asphaltic concrete	An-3
	Suever Stone Co., Inc.	Suever Stone Co., Inc.	Spencer	Tymochtee Dolomite (Silurian)	crushed stone—road construction/ resurfacing, asphaltic concrete, commercial building, extenders/fillers, aglime	An-4
Athens	Waterloo Coal Co., Inc.	Diamond Stone	Lee	Brush Creek limestone (Pennsylvanian)	crushed stone—unspecified	As-533
Auglaize	Con-Ag, Inc.	Con-Ag, Inc.	Noble	Cedarville Dolomite (Silurian)	crushed stone—riprap, road construction/ resurfacing, asphaltic concrete	Ae-31
	National Lime & Stone Co.	Buckland Plant	Moulton	Silurian	crushed stone—riprap, portland cement concrete, asphaltic concrete, aglime	Ae-10
Belmont	Ayers Limestone Quarry, Inc.	Ayers Limestone Quarry, Inc.	Pease	Permian	crushed stone—riprap, road construction/ resurfacing	Bt-716
	Sidwell Materials, Inc.	Bellaire Stone	Pultney	Fishpot limestone (Pennsylvanian)	crushed stone—riprap, road construction/ resurfacing	Bt-1190
		Uniontown Stone	Wheeling	Fishpot limestone (Pennsylvanian)	crushed stone—road construction/ resurfacing	Bt-N
Brown	Hanson Aggregates Davon, Inc.	Eagle Crushed Stone	Eagle	Brassfield Limestone (Silurian)	crushed stone—unspecified	Bn-EC
Clark	Demmy Construction, Inc.	Demmy Constuction, Inc.	Mad River		crushed stone—road construction/ resurfacing	Ck-501
Clinton	The Melvin Stone Co., LLC	Melvin	Richland	Cedarville Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone, aglime	Cln-1
Crawford	National Lime & Stone Co.	Bucyrus Plant	Holmes	Columbus & Delaware Limestones (Devonian)	crushed stone—riprap, portland cement concrete, flux, asphaltic concrete, extenders/fillers, aglime	Cd-1
Darke	Martin Marietta Aggregates	Fort Jefferson Limestone	Butler	Cedarville Dolomite (Silurian)	crushed stone—asphaltic concrete	Dke-1
Delaware	Martin Marietta Aggregates	Delaware #332	Scioto	Columbus Limestone (Devonian)	crushed stone—road construction/ resurfacing, asphaltic concrete	Del-3

2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Delaware (cont.)		Meredith Quarry #359	Radnor	Columbus & Delaware Limestones (Devonian)	crushed stone—commercial building	Del-2
		Shawnee #324	Concord	Columbus & Delaware Limestones (Devonian)	crushed stone—riprap, road construction/ resurfacing	Del-4
	National Lime & Stone Co.	Delaware Plant	Scioto	Columbus & Delaware Limestones (Devonian)	crushed stone—riprap, portland cement concrete, asphaltic concrete, aglime	Del-5
Erie	Erie Blacktop, Inc.	Erie Blacktop Quarry	Margaretta		crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete	Ee-27
	Hanson Aggregates Midwest, Inc.	Sandusky Quarry	Groton	Columbus & Delaware Limestones, Detroit River Group (Devonian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, railroad ballast, asphaltic concrete, commercial building	Ee-11
	Kellstone, Inc.	Kellstone, Inc.	Kelleys Island	Columbus Limestone & Detroit River Group (Devonian)	crushed stone—unspecified	Ee-K
	Wagner Quarries Co.	Wagner Quarries Co.	Perkins	upper Columbus & Delaware Limestones (Devonian)	crushed stone—road construction/ resurfacing	Ee-1
Franklin	Martin Marietta Aggregates	Columbus Limestone #321	Franklin, Jackson, Marion	Columbus Limestone (Devonian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building	Fn-53
		Marble Cliff #323	Norwich	Columbus Limestone (Devonian), Salina Group (Silurian)	crushed stone—road construction/ resurfacing	Fn-2
	Olen Corp.	Hilliard Plant #1	Brown	Salina Group (Silurian)	crushed stone—road construction/ resurfacing, commercial building	Fn-43
Greene	Martin Marietta Aggregates	Cedarville Limestone	Cedarville	Cedarville Dolomite (Silurian)	crushed stone—unspecified	Ge-17
	Southdown Inc.	Batdorf, Feirstine, Schneider	Bath, Beaver Creek	upper Brassfield Limestone (Silurian)	crushed stone—commercial building, portland cement manufacture	Ge-9
		Miller et al.	Bath	Brassfield Limestone(Silurian)	crushed stone—portland cement manufacture	Ge-8
	The Melvin Stone Co., LLC	Bowersville	Jefferson	Cedarville Dolomite (Silurian)	crushed stone—road construction/ resurfacing, asphaltic concrete, commercial building	Ge-M
	The Quarry, LLC	The Quarry	Bath	Brassfield Limestone (Silurian)	crushed stone—road construction/ resurfacing	Ge-Q
Guernsey	King Limestone, Inc.	King Limestone, Inc.	Spencer	Fishpot limestone (Pennsylvanian)	crushed stone—road construction/ resurfacing, commercial building	Gy-309
Hancock	National Lime & Stone Co.	Findlay Plant	Liberty	Salina Group (Silurian)	crushed stone—riprap, portland cement concrete, asphaltic concrete	Hk-7
Hardin	C. E. Duff & Son, Inc.	C. E. Duff & Son, Inc.	Jackson	Silurian	crushed stone—riprap, portland cement concrete, road construction/resurfacing, commercial building	Hdn-S

	Shelly Materials, Inc.	Hardin Quarry	Pleasant	Tymochtee Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, commercial building, aglime	Hdn-2
Highland	Hanson Aggregates Davon, Inc.	Highland Stone	Hamer	Brassfield & Dayton Limestones (Silurian)	crushed stone—unspecified	Hd-2
	Marshall Quarry, Inc.	Marshall Quarry, Inc.	Marshall		crushed stone—unspecified	Hd-4
	Martin Marietta Aggregates	Lynchburg Quarry	Union	Brassfield Limestone (Silurain)	crushed stone—unspecified	Hd-M
	Ohio Asphaltic Limestone Corp.	Ohio Asphaltic Limestone Corp.	Union		crushed stone—riprap, road construction/ resurfacing, asphaltic concrete, aglime	Hd-3
Hocking	Maxville Quarries, Inc.	St. Clair	Falls Gore	Maxville Limestone (Mississippian)	crushed stone—road construction/ resurfacing	Hg-M
Jackson	Waterloo Coal Co., Inc.	Waterloo Coal Stone Plant-Zoar Mill	Madison	Vanport limestone (Pennsylvanian)	crushed stone—unspecified	Jkn-367
Jefferson	K.C.C.I.	Apex	Springfield	Pittsburgh limestone (Pennsylvanian)	crushed stone—riprap, road construction/ resurfacing, railroad ballast, commercial building, unspecified	Jfn-K
Logan	C. E. Duff & Son, Inc.	C. E. Duff & Son, Inc.	Richland	Silurian	crushed stone—riprap, portland cement concrete, road construction/resurfacing, commercial building	Lgn-15
	Martin Marietta Aggregates	East Liberty #326	Perry	Columbus Limestone (Devonian)	crushed stone—road construction/ resurfacing, asphaltic concrete	Lgn-1
	Shelly Materials, Inc.	Belle Center Plant #8	McArthur, Richland	Tymochtee Dolomite (Silurian)	crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified	Lgn-2
Lucas	Barrett Paving Materials, Inc.	Sylvania Quarry	Sylvania	Detroit River Group & upper Dundee Limestone (Devonian)	crushed stone—riprap, road construction/ resurfacing, asphaltic concrete,commercial building	Ls-12
	Hanson Aggregates Midwest, Inc.	Sylvania Quarry	Sylvania	Detroit River & upper Dundee Limestone (Devonian)	crushed stone—unspecified	Ls-3
		Waterville Quarry	Waterville	Bass Islands Group, Greenfield & Tymochtee Dolomites (Silurian)	crushed stone—unspecified	Ls-1
	Seaway Sand & Stone, Inc.	Seaway Sand & Stone, Inc.	Swanton	Detroit River Group & upper Dundee Limestone (Devonian)	crushed stone—unspecified	Ls-13
	Stoneco, Inc.	Maumee Quarry	Waynesfield		crushed stone—unspecified	Ls-2
Mahoning	East Fairfield Coal Co.	Withers-Petersburg	Springfield	Vanport limestone (Pennsylvanian)	crushed stone—unspecified	Mg-631
	ESSROC Cement Corp.	Bessemer Pit	Poland	Vanport limestone (Pennsylvanian)	crushed stone—portland cement manufacture	Mg-608
		Carbon Pit	Poland, Springfield	Vanport limestone (Pennsylvanian)	crushed stone—portland cement manufacture	Mg-EM
	Honey Creek Stone Co.	Honey Creek Stone Co.	Springfield	Vanport limestone (Pennsylvanian)	crushed stone—road construction/ resurfacing	Mg-54
	Lafarge North America	Petersburg	Springfield	Vanport limestone (Pennsylvanian)	crushed stone—road construction/ resurfacing	Mg-L

2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Marion	J. M. Hamilton & Sons Co., Inc.	J. M. Hamilton & Sons Co., Inc.	Marion	Columbus & Delaware Limestones (Devonian)	crushed stone—road construction/ resurfacing	Mn-2
	National Lime & Stone Co.	Marion Plant	Grand Prairie, Marion	Columbus & Delaware Limestones (Devonian)	crushed stone—riprap, portland cement concrete, asphaltic concrete, aglime	Mn-3
	Shelly Materials, Inc.	Tri-County Limestone Co.	Grand	Tymochtee Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, asphaltic concrete	Mn-1
Mercer	Morrow Gravel Co.	Rockford Quarry	Dublin	Lockport Dolomite (Silurian)	crushed stone—unspecified	Mr-2
	Stoneco, Inc.	Celina Quarry	Jefferson	Silurian	crushed stone—unspecified	Mr-1
Miami	Barrett Paving Materials, Inc.	Barrett Paving Materials Inc. #139	Union		crushed stone—road construction/ resurfacing	Mi-BPM
		Gregory Stone Inc.	Union	Brassfield Limestone (Silurian)	crushed stone—road construction/ resurfacing	Mi-502
	C. F. Poeppelman, Inc.	C. F. Poeppelman, Inc.	Newberry	Cedarville Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, aglime	Mi-10
	Piqua Materials, Inc.	Piqua Minerals Division	Springcreek, Staunton	Brassfield Limestone, Dayton & Laurel Dolomites (Silurian)	crushed stone—riprap, road construction/ resurfacing, flux, commercial building, extenders/fillers, aglime	Mi-1
Monroe	Christman Quarry	Christman Quarry	Franklin, Seneca		crushed stone—riprap	Me-C
Montgomery	Martin Marietta Aggregates	Phillipsburg Limestone #339	Clay	Cedarville Dolomite (Silurian)	crushed stone—riprap, road construction/ resurfacing, asphaltic concrete, commercial building	My-1
	Southdown Inc.	G-Tract	Wayne	upper Brassfield Limestone (Silurian)	crushed stone—dimension stone, portland cement manufacture	My-58
Muskingum	Chesterhill Stone Co.	East Fultonham	Newton	Maxville Limestone (Mississippian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, railroad ballast, asphaltic concrete, commercial building	Mum-106
	King Limestone, Inc.	King Limestone, Inc.	Rich Hill	Fishpot limestone (Pennsylvanian)	crushed stone—road construction/ resurfacing, commercial building	Gy-309
	Pleasant Valley Limestone	Thompson Mining/Pleasant Valley Stone	Hopewell	Maxville Limestone (Mississippian)	crushed stone—unspecified	Mum-907
	Sidwell Materials, Inc.	Dupler/Ford	Newton	Maxville Limestone (Mississippian)	crushed stone—road construction/ resurfacing	Mum-SB
		White Cottage	Newton	Maxville Limestone (Mississippian)	crushed stone—road construction/ resurfacing	Mum-104
Noble	King Quarries, Inc.	King Quarries, Inc.	Olive		crushed stone—riprap	Ne-K1
	Sharon Stone Co.	Sharon Stone Co.	Noble, Sharon	Fishpot limestone (Pennsylvanian)	crushed stone—riprap, road construction/ resurfacing	Ne-S

Ottawa	Fox Stone Products, Inc.	Fox Stone Products, Inc.	Put-In-Bay		crushed stone—commercial building	Oa-18
	Graymont Dolime (OH) Inc.	GenLime Inc.	Clay	Lockport Dolomite (Silurian)	crushed stone—road construction/ resurfacing; lime (burned stone)—chemical and industrial, refractory	Oa-1[1]
	Lafarge North America	Marblehead	Danbury	Columbus Limestone & Detroit River Group (Devonian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building	Oa-7
	Stansley Mineral Resources	Stansley Mineral Resources, Genoa Plant	Clay	Lockport Dolomite (Silurian)	crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building	Oa-1A[1]
	Stoneco, Inc.	Rocky Ridge Quarry	Benton		crushed stone—unspecified	Oa-14
	White Rock Quarry, LLC	White Rock Quarry	Allen	Silurian	crushed stone—riprap, road construction/ resurfacing, railroad ballast, asphaltic concrete	Oa-6
Paulding	Hanson Aggregates Midwest, Inc.	Hanson Paulding Plant	Crane	Tenmile Creek Dolomite (Devonian)	crushed stone—unspecified	Pg-7[2]
	Lafarge Corp.	Paulding Quarry	Crane	Dundee Limestone (Devonian)	crushed stone—portland cement manufacture	Pg-1[2]
	Stoneco, Inc.	Auglaize Quarry	Auglaize	Detroit River Group & Dundee Limestone (Devonian)	crushed stone—unspecified	Pg-2
Perry	Maxville Quarries, Inc.	Downhour	Monday Creek	Maxville Limestone (Mississippian)	crushed stone—road construction/ resurfacing	Py-235
Pickaway	The Melvin Stone Co., LLC	Williamsport	Perry	Columbus Limestone (Devonian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, railroad ballast, asphaltic concrete, commercial building	Pky-4
Pike	Latham Limestone, Inc.	Latham Limestone, Inc.	Mifflin	Greenfield Dolomite (Silurian)	crushed stone—riprap, road construction/ resurfacing, aglime	Pke-13
Preble	Wysong Stone Co.	Wysong Stone Co.	Twin	Brassfield Limestone (Silurian)	crushed stone—riprap, road construction/ resurfacing, dimension stone	Pre-5
Putnam	National Lime & Stone Co.	Rimer Plant	Sugar Creek	Greenfield Dolomite (Silurian)	crushed stone—portland cement concrete, asphaltic concrete	Pm-N
	Putnam Stone Co.	Putnam Stone Co.	Pleasant, Riley	Silurian	crushed stone—riprap, portland cement concrete, road construction/resurfacing	Pm-2
Ross	The Melvin Stone Co., LLC	Plano Road	Concord	Salina Group (Silurian)	crushed stone—portland cement concrete, road construction/resurfacing, railroad ballast	Rs-MC1
Sandusky	Martin Marietta Magnesia Specialties, Inc.	Woodville Quarry	Woodville	Silurian	crushed stone—road construction/ resurfacing	Sy-1
	Millersville Lime Inc.	Millersville Plant	Jackson	Lockport Dolomite (Silurian)	crushed stone—aglime; lime (burned stone)—chemical and industrial, refractory	Sy-4

[1]Graymont Dolime (OH), Inc., and Stansley Mineral Resources operate from the same mine.
[2]Hanson Aggregates Midwest, Inc. and Lafarge Corp. operate from the same mine.

2001 OHIO DIRECTORY OF LIMESTONE/DOLOMITE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of mine or quarry	Township	Geological unit	Type and principal use	State mine number
Sandusky (cont.)	Precision Aggregates III, LLC	Precision Aggregates III, LLC	Sandusky		crushed stone—portland cement concrete, commercial building	Sy-5
Seneca	Carmeuse Ohio Inc.	Maple Grove Works	Liberty	Lockport Dolomite (Silurian)	crushed stone—road construction/ resurfacing	Sa-2
	Hanson Aggregates Midwest, Inc.	Bloomville Quarry	Bloom	Columbus & Delaware Limestones, Detroit River Group (Devonian)	crushed stone—unspecified	Sa-3
		Flat Rock Quarry	Thompson	Columbus & Delaware Limestones, Detroit River Group (Devonian)	crushed stone—unspecified	Sa-1
	North Shore Stone Quarries, Inc.	North Shore Stone Quarries, Inc.	Thompson		crushed stone—riprap, dimension stone	Sa-8
Shelby	Barrett Paving Materials, Inc.	River Quarry	Clinton		crushed stone—road construction/ resurfacing	Shy-15
	Miami River Stone Co.	Miami River Stone Co.	Orange		crushed stone—riprap, road construction/ resurfacing	Shy-17
		Rock Run	Washington		crushed stone—commercial building	Shy-16
		Staley Pit	Clinton, Salem		crushed stone—commercial building	Shy-SS
Stark	ENZ, Inc.	Sickafoose Pit	Pike, Sandy		crushed stone—riprap, road construction/ resurfacing	Sk-208
Tuscarawas	Belden Brick Co.	Belden Pit	Sugar Creek	Vanport limestone (Pennsylvanian)	crushed stone—riprap	Ts-1646
		Moomaw Pit	Sugar Creek	Vanport limestone (Pennsylvanian)	crushed stone—riprap	Ts-1517
		Wallick Pit	Franklin, Wayne	Pennsylvanian	crushed stone—riprap	Ts-1841
	Kimble Clay & Limestone Co.	Kimble Clay & Limestone Co.	Dover	Putnam Hill & Vanport limestones (Pennsylvanian)	crushed stone—riprap, road construction/ resurfacing	Ts-1818
	Sidco Development, Inc.	Midvale Sand & Gravel	Goshen		crushed stone—asphaltic concrete	Ts-S2
Union	Shelly Materials, Inc.	Ostrander Plant #10	Mill Creek	Columbus Limestone (Devonian)	crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified	Un-2
		York Center #11	York		crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, unspecified	Un-1
Van Wert	Ridge Township Quarry	Ridge Township Quarry	Ridge	Tymochtee Dolomite (Silurian)	crushed stone—unspecified	Vt-7
	Stoneco, Inc.	Scott Quarry	Union		crushed stone—unspecified	Vt-3
	Suever Stone Co., Inc.	Suever Stone Co., Inc.	Washington	Tymochtee Dolomite (Silurian)	crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building	Vt-1
Vinton	Quality Stone Co.	Route 32	Clinton		crushed stone—unspecified	Vn-193

Wood	Custar Stone Co.	Custar Stone Co.	Milton		crushed stone—riprap, portland cement concrete, road construction/resurfacing, asphaltic concrete, unspecified, aglime	Wd-5
	MacRitchie Materials, Inc.	MacRitchie Materials, Inc.	Perry	Lockport Dolomite & Salina Group (Silurian)	crushed stone—unspecified	Wd-1
	Precision Aggregate, Inc.	Precision Aggregate II	Portage		crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building, dimension stone	Wd-14
	Stoneco, Inc.	Lime City Quarry	Perrysburg		crushed stone—unspecified	Wd-6
		Portage Quarry	Portage	Greenfield & Lockport Dolomites (Silurian)	crushed stone—unspecified	Wd-11
Wyandot	National Lime & Stone Co.	Carey Plant	Crawford	Lockport Dolomite (Silurian)	crushed stone—riprap, portland cement concrete, railroad ballast, flux, asphaltic concrete; lime (burned stone)—chemical and industrial	Wt-1
	Olen Corp.	McCarthy Quarry	Pitt	Bass Islands Group (Silurian)	crushed stone—portland cement concrete, road construction/resurfacing, asphaltic concrete, commercial building	Wt-3
	Wyandot Dolomite, Inc.	Wyandot Dolomite, Inc.	Crawford	Greenfield & Lockport Dolomites (Silurian)	crushed stone—riprap, portland cement concrete, road construction/resurfacing, railroad ballast, asphaltic concrete, commercial building	Wt-8

2001 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
ATS Enterprises	1	335,995	343,140
Agg Rok Materials	1	914,571	901,215
William Albert, Inc.	2	39,907	41,917
Alden Sand & Gravel Co.	1	20,563	20,563
Allgeier & Son, Inc.	2	220,000	220,000
American Excavating, Inc.	1	2,645	31,000
American Sand & Gravel, Inc.	2	1,305,597	1,305,597
Apache Aggregate & Paving Co.	1	119,923	135,429
Ashcraft Sand & Gravel, Inc.	1	11,544	11,544
Atlas Towing Co.	1	14,022	14,022
B & L Sand Co.	1	2,459	2,459
Baisden Sand & Gravel	1	138,008	160,008
Baker Sand, Inc.	1	644,998	644,998
Ballentine Excavation Co.	1	31,895	31,895
Barrett Paving Materials, Inc.	5	1,350,725	1,632,724
Bartley & Bolin Excavating	2	210,098	210,098
Beck Sand & Gravel, Inc.	1	189,992	189,992
Paul D. Beery Trucking Co.	1	6,572	0
Blue Stone Sand & Gravel, Inc.	1	128,171	24,000
D. H. Bowman & Sons, Inc.	1	52,969	68,100
Boyas Excavating, Inc.	1	22,000	22,000
Boyd Excavating	1	9,876	9,876
Briggs Sand & Gravel, Inc.	1	5,483	5,483
Broshear Contractors, Inc.	1	87,255	87,255
Oscar Brugmann Sand & Gravel, Inc.	1	509,030	552,000
Buckeye Excavating Development, Inc.	1	11,664	11,664
James Bunnell, Inc.	2	1,020,724	1,020,724
Burlington Sand & Gravel Co.	1	1,224	1,224
C.I.R., Inc.	1	1,471	1,471
Joe E. Carter	1	500	500
Carter & Carter, Inc.	1	4,816	6,000
Central-Allied Enterprises, Inc.	4	1,276,150	1,276,150
Chesterhill Stone Co.	3	615,946	653,036
Chesterville Sand & Gravel Co., Inc.	1	245,438	245,539
Clemson Excavating, Inc.	1	31,726	31,726
M. J. Coates Construction Co., Inc.	2	147,726	147,726
Cochran Transportation Services, Inc.	1	28,506	28,506
Bill D. Colwell	1	24,000	24,000
Donald A. Coy	1	9,995	9,995
Craigton Shale Co.	1	106,612	106,612
Crosby Gravel, Inc.	1	34,372	34,372
R. A. Cruise Sand & Gravel, Inc.	1	43,865	43,865
D & K Materials, Inc.	1	39,752	39,752
D.G.M., Inc.	1	48,085	48,085
Darby Creek Excavating, Inc.	1	108,480	108,480
Demmy Construction, Inc.	1	13,659	13,659
Demmy Sand & Gravel	1	6,956	6,956
Dingledine Basic Materials, Inc.	1	94,176	65,462
James E. Downard	1	8,041	8,041
Dravo Lime, Inc.	2	0	1,750
C. E. Duff & Son, Inc.	2	7,908	7,908
Eagle Material Supply Ltd.	1	235,882	255,000
David E. Edgington	1	35,151	35,151
Enon Washed Sand & Gravel Co.	1	312,480	357,870
Erie Blacktop, Inc.	1	56	0
Erie Materials, Inc.	1	865	0
Erie Sand & Gravel Co.	1	8,250	8,250
Feikert Sand & Gravel, Inc.	1	96,207	96,207
Fenner Sand & Gravel, Inc.	1	104,000	104,000
Fleming Construction Co., Inc.	2	36,369	36,369
Flesher Sand & Gravel, Inc.	1	764	764
Foureman's Sand & Gravel, Inc.	1	101,860	160,500
Frye Sand & Gravel, Inc.	2	3,244	3,244
GANS Ltd.	1	5,839	2,000
Ganges Gravel Co.	1	35,844	41,094
John L. Garber Materials, Inc.	1	227,162	235,000
Gibson Sand & Gravel Co.	1	648	648
Gillum Bros. Excavating	1	5,000	5,000
Golsch Construction, Inc.	1	4,500	5,000
Joyce A. Good	1	2,911	2,911
Grimes Excavating	1	162,930	162,930
Hanson Aggregates Davon, Inc.	2	733,391	745,553
Norman Harpster	1	100	100
Harrison Sand & Gravel Co.	1	11,861	11,861
Hartley Gravel	1	9,300	9,300
Harvest Sand & Gravel, Inc.	1	51,514	56,666
Haubeil & Sons Asphalt & Materials, Inc.	1	92,225	92,225
Haueter Sand & Gravel, Inc.	2	191,023	191,023
Heiser Sand & Gravel Corp.	1	32,325	32,325
Hilltop Aggregate, Inc.	1	227,788	227,788
Hilltop Basic Resources, Inc.	2	1,113,499	1,277,560
Hocking Valley Concrete, Inc.	1	78,000	85,000
Hollinger Excavating	1	65	65
William A. Hoffman, Jr.	1	1,452	1,452
Holmes Supply Corp.	1	244,477	244,477
Hugo Sand Co.	1	215,609	215,609
George J. Igel & Co., Inc.	1	800	800
Inland South Aggregates	1	9,505	12,780
JALIP, LTD.	1	2,261	2,261
JBM Ltd.	1	88,103	88,103
JP Sand & Gravel Co.	1	441,751	441,751
Jaclib Enterprises, Inc.	1	3,705	3,705
Janson & Sons Corp.	1	101,748	101,748
Jarrett Sand Co.	1	1,008	1,008
Jaymar, Inc.	1	567,256	567,256
Jefferson Materials Co.	1	396,055	396,055
Joseph Sand & Gravel, Inc.	1	20,202	20,202
Kilbarger Construction, Inc.	1	21,975	21,975
Kinsman Materials, LTD.	1	87,172	87,172
Kipp's Gravel Co., Inc.	1	72,648	72,648
Kirby's Sand & Gravel, Inc.	1	92,990	92,990
T & K Kuhnle Co.	1	103,097	103,097
L & I Natural Resources, Inc.	1	91,941	91,941
L & M Mineral Co.	1	3,820	3,820
LUB, Inc.	1	25,000	30,500
Lafarge North America	1	739,054	637,731
Lakeside Sand & Gravel Co.	1	437,481	437,481
Lancaster Limestone	1	1,300	1,300
Link Trucking Co., Inc.	1	22,887	22,887
Little Miami Sand & Gravel	2	0	3,105

2001 SAND AND GRAVEL COMPANIES WITH SALES OR PRODUCTION (cont.)

Company	No. of operations	Sales (tons)	Production (tons)
Loxley Aggregates, Inc.	1	2,495	2,495
Lucky Sand & Gravel Co.	1	73,198	73,198
Al Mackey Enterprises, Inc.	2	1,434	1,434
Martin Marietta Aggregates	17	10,786,152	9,708,479
R.J. Martin Service & Excavating	1	906	906
Mason's Sand & Gravel Co./ George C. Smith	1	140,886	140,886
Massillon Materials, Inc.	3	689,456	689,456
Mathews Sand & Gravel	1	720	720
Mecco, Inc.	1	225,677	237,000
Mechanicsburg Sand & Gravel, Inc.	1	192,622	192,622
Meigs County Commissioners	1	17,221	15,441
The Melvin Stone Co., LLC	1	307,760	265,858
Menuez Bros. Sand & Gravel, Inc.	1	187,356	189,000
Miami River Stone Co.	2	149,036	189,563
Miami View Mining Co., Ltd.	1	555,821	555,821
Miller Bros. Gravel, Inc.	1	365,901	334,506
Miller Sand & Gravel, Inc.	1	1,121	1,121
Mills Rock, Sand, & Soil, Inc.	1	30,611	30,611
Moore's Excavating Co.	3	33,333	17,735
Moraine Materials Co., Inc.	2	582,919	582,919
Morrow Gravel Co.	2	227,251	227,251
Muskingum River Gravel Co.	5	843,442	873,367
National Aggregates, Inc.	1	446,184	446,184
National Lime & Stone Co.	2	407,000	407,000
Neer's Sand & Gravel	1	153,012	176,448
Nelson Sand & Gravel, Inc.	1	87,500	87,500
New Carlisle Sand & Gravel Co.	1	640	640
Newton Asphalt Paving, Inc.	1	148,994	148,994
Nick's Trucking	1	3,500	3,500
Andy Nixon Contractors, Inc.	1	88,384	88,384
Northern Ohio Paving Co.	1	587,710	587,710
Northwest Ohio Property Developments, Ltd.	1	13,268	13,268
Carl E. Oeder & Sons Sand & Gravel	1	423,102	423,102
Olen Corp.	4	3,074,213	3,498,024
Oneida Sand & Gravel, Inc.	1	104,440	104,440
Osborne Materials Co.	1	169,762	169,762
Oster Sand & Gravel, Inc.	3	966,036	966,036
Ours Sand & Gravel	1	4,789	4,789
Phillips Sand & Gravel	1	361,204	361,204
Power Development Corp.	1	1,430	1,430
Prairie Lane Sand & Gravel Co.	1	211,707	209,842
Precision Aggregate, Inc.	2	121,730	121,730
Precision Aggregates III, LLC	1	43,800	43,800
Quality Ready Mix, Inc.	1	32,603	32,603
Gary Roberts Excavating	1	2,150	2,150
R. L., Ltd.	1	2,867	2,867
Rainbow Sand & Gravel, Inc.	1	119,971	119,971
Red Brush Peat Co.	1	47	47
Riverside Sand & Gravel Co., Inc.	1	20,298	20,298
Rockwell Sand & Gravel, Inc.	1	257,604	257,604
Roy M. Roush	1	927	1,000
Rupp Construction, Inc.	1	249,456	249,456
S & S Aggregate, Inc.	3	611,006	658,943
Samco, Inc.	1	271,445	271,445
Sandman Trucking, Inc.	1	169,861	169,861
Guy Schieve	1	9,100	9,100
Schloss Materials Co.	1	186,892	186,892
Mark E. Scott	1	30,000	30,000
Seaway Sand & Stone, Inc.	1	52,658	52,658
Seville Sand & Gravel, Inc.	1	193,615	193,615
Shady Bend Sand & Gravel	1	155,302	155,302
Shamrock Materials, Inc.	1	613,469	616,758
Sharon Stone Co.	1	40,402	50,000
Shelly Materials, Inc.	6	2,275,814	2,275,814
Sidco Development, Inc.	1	289,488	309,229
R. W. Sidley, Inc.	2	150,000	160,000
Joe Simak & Sons Trucking, Inc.	3	50,321	50,321
Small's Sand & Gravel, Inc.	4	353,585	353,585
Sober Sand & Gravel Co.	1	30,566	30,566
Soehnlen Bros. Sand & Gravel, Inc.	1	133,365	133,365
Solomon's Mines, Inc.	1	118,783	118,783
Solon Excavators Sand & Gravel, Inc.	3	193,489	187,268
Soltis Sand & Gravel	1	5,057	5,057
South Central Sand & Gravel	1	28,934	28,934
Southern Ohio Aggregates, Inc.	1	20,526	20,526
Spring Creek Corp.	1	455,000	529,000
Spring Run Gravel	1	13,396	13,396
Stewart & Reichman, Inc.	1	75,101	75,101
Stocker Sand & Gravel Co.	2	1,099,368	1,099,368
Stoneco, Inc.	1	15,410	15,410
Tackett Builders	1	328	328
Teague Gravel Co., Inc.	1	45,695	45,695
Thiel Construction Co.	1	2,494	2,494
Thomas Sand & Gravel	1	140	680
Tipp Stone Co., Inc.	2	122,089	122,089
Trout Sand & Gravel Co.	1	18,685	35,472
Tuffco Sand & Gravel, Inc.	1	187,229	187,500
Twinsburg Development Corp.	1	215,148	265,541
U.S. Aggregates, Inc.	1	52,500	0
United Aggregates, Inc.	1	223,905	168,707
Valley Materials Co.	2	79,970	42,913
Van Wey Sand & Gravel, Inc.	1	839,580	860,000
Walcottville Sand & Gravel Corp.	1	107,173	128,156
Walhonding Sand & Gravel	1	1,627	1,627
Wallace Road Sand & Gravel	1	1,380	1,380
Carl Walter	1	2,600	2,600
Ward Materials, Inc.	1	33,482	36,232
Waterloo Coal Co., Inc.	1	7,494	7,494
Watson Gravel, Inc.	4	2,176,427	2,176,427
Weber Sand & Gravel, Inc.	1	234,552	234,552
Welch Sand & Gravel, Inc.	3	1,192,322	1,192,322
Gene T. Wilson	1	928	928
Joann O. Weddle	1	29,487	29,487
Willowbrook Sand & Gravel	1	34,911	34,911
Wysong Gravel Co.	2	337,113	337,113
X L Sand & Gravel	1	58,197	58,197
Young's Sand & Gravel Co.	3	1,558,781	1,558,781
Zollinger Sand & Gravel Co.	1	82,996	82,996
TOTAL: 218 companies	302	56,829,272	56,848,867

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Ald-G).

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Allen	Ward Materials, Inc.	Ward Materials, Inc.	Monroe	sand—portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified gravel—building, unspecified	An-W
Ashland	Bartley & Bolin Excavating	Bartley & Bolin, Inc. Plant #2	Mohican	sand—building gravel—building, bank run	Ald-9
	Joyce A. Good	Joyce A. Good	Jackson	sand—road construction/resurfacing gravel—road construction/resurfacing	Ald-G
	Young's Sand & Gravel Co.	Young's Sand Gravel Co.	Green	sand—building, road construction/resurfacing, unspecified gravel—building, road construction/resurfacing, unspecified	Ald-7
		Ayers	Green	sand—building, road construction/resurfacing, unspecified gravel—building, asphaltic concrete, unspecified	Ald-15
		Chuck Spreng	Green	sand—building, road construction/resurfacing, unspecified gravel—building, road construction/resurfacing, unspecified	Ald-Y
Ashtabula	Clemson Excavating, Inc.	Clemson	Hartsgrove	sand—fill gravel—filtration, decorative, fill	Asa-C
	Frye Sand & Gravel, Inc.	Frye Sand & Gravel, Inc.	Denmark	gravel—bank run	Asa-10
		Frye Sand & Gravel, Inc.	Monroe	gravel—bank run	Asa-F
	Kinsman Materials, LTD.	Kinsman Materials, LTD.	Wayne	sand—building gravel—building	Asa-20
	Mathews Sand & Gravel	Mathews Sand & Gravel	North Kingsville	sand—unspecified gravel—unspecified	Asa-M
	Nelson Sand & Gravel, Inc.	Nelson Sand & Gravel, Inc.		sand—building gravel—building	Asa-N1
	R. W. Sidley, Inc.	Sidley-Kingsville Pit	Kingsville	sand—building, portland cement concrete gravel—building	Asa-15
	Joe Simak & Sons Trucking, Inc.	Amboy Pit	Kingsville	sand—building	Asa-ST
		Basen Pit	Kingsville	sand—building, asphaltic concrete, fill gravel—filtration	Asa-ST1
		North Ridge Pit	Kingsville	sand—building, fill, ice control gravel—building, filtration	Asa-18
Athens	Cochran Transportation Services, Inc.	Circle Hill Sand & Gravel, Inc.	Dover	sand—unspecified gravel—unspecified	As-595
	Olen Corp.	Stewart Plant #4	Rome	sand—portland cement concrete gravel—building	As-W
Auglaize	Joseph Sand & Gravel, Inc.	Joseph Sand & Gravel, Inc.	Union	sand—fill gravel—filtration, fill	Ae-23
	National Lime & Stone Co.	Wapakoneta Plant	Union	sand—portland cement concrete, fill gravel—fill	Ae-30
	Quality Ready Mix, Inc.	Quality Ready Mix, Inc.	Pusheta	sand—building, portland cement concrete gravel—building, portland cement concrete	Ae-16

Butler	Broshear Contractors, Inc.	Green Heron	Ross	sand—pipe bedding gravel—road construction/resurfacing	Br-B
	Bill D. Colwell	Bill D. Colwell Gravel	St. Clair	gravel—pipe bedding	Br-36
	Dingledine Basic Materials, Inc.	Dingledine Basic Materials, Inc.	Milford	sand—fill gravel—unspecified	Br-50
	Martin Marietta Aggregates	Fairfield Sand & Gravel	Fairfield, Ross	sand—unspecified gravel—unspecified	Br-35
		Hamilton	St. Clair	sand—unspecified gravel—unspecified	Br-5
		Ross Sand & Gravel	Fairfield, Ross	sand—unspecified gravel—unspecified	Br-29
	Mecco, Inc.	Mecco, Inc.	Lemon	sand—building, portland cement concrete, asphaltic concrete gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing	Br-15
	Moraine Materials Co., Inc.	Moraine Materials Co., Inc. Plant 22	Madison	sand—unspecified gravel—unspecified	Br-6
	Shamrock Materials, Inc.	Shamrock	Madison	sand—unspecified gravel—unspecified	Br-52
	Watson Gravel, Inc.	River Pit	Fairfield	gravel—building, asphaltic concrete, road construction/resurfacing	Br-57
		Watson Pit	Fairfield	sand—building, portland cement concrete, asphaltic concrete, fill gravel—building, road construction/resurfacing	Br-47
	Welch Sand & Gravel, Inc.	Schlichter Pit	Fairfield	sand—building gravel—building	Br-38
Carroll	Oneida Sand & Gravel, Inc.	Oneida Sand & Gravel, Inc.	Brown	sand—road construction/resurfacing gravel—road construction/resurfacing	Cl-204
	Power Development Corp.	Power Development Corp.	Brown	sand—road construction/resurfacing gravel—road construction/resurfacing	Cl-PD
Champaign	Mechanicsburg Sand & Gravel, Inc.	Mechanicsburg Sand & Gravel, Inc.	Union	sand—unspecified gravel—unspecified	Cpn-22
	Moore's Excavating Co.	Moore's Excavating Co.	Salem	sand—building gravel—building	Cpn-20
		Moore's Excavating Co.	Salem, Wayne	sand—building gravel—building	Cpn-25
	Morrow Gravel Co.	Urbana	Urbana	sand—unspecified gravel—unspecified	Cpn-1
Clark	American Excavating, Inc.	American Excavating, Inc.	Bethel	gravel—road construction/resurfacing	Ck-A
	Baisden Sand & Gravel	Baisden	German	sand—portland cement concrete gravel—building, portland cement concrete, asphaltic concrete	Ck-B
	Barrett Paving Materials, Inc.	Barrett Paving Materials Inc.	Mad River	sand—unspecified gravel—unspecified	Ck-28
	Demmy Construction, Inc.	Demmy Constuction, Inc.	Mad River	sand—fill gravel—filtration	Ck-501
	Demmy Sand & Gravel	Demmy Sand & Gravel	Mad River	sand—building	Ck-502
	Enon Washed Sand & Gravel Co.	Enon Washed Sand & Gravel Co.	Bethel, Mad River	sand—building, portland cement concrete, unspecified gravel—portland cement concrete, asphaltic concrete, unspecified	Ck-3

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Clark (cont.)	Martin Marietta Aggregates	Fairborn Gravel	Bethel	sand—unspecified gravel—unspecified	Ck-13
	Moore's Excavating Co.	Moore's Excavating Co.	Moorefield	sand—building gravel—building	Ck-29
	Shelly Materials, Inc.	Springfield Plant #3	Springfield	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Ck-25
Clermont	Barrett Paving Materials, Inc.	Barrett Paving Materials-Perintown	Union	sand—unspecified gravel—unspecified	Ct-9
	Dravo Lime, Inc.	Jones Pit	Washington	sand—reclamation gravel—reclamation	Ct-11
	Kipp's Gravel Co., Inc.	Kipp's Gravel Co., Inc.	Stonelick	sand—unspecified gravel—unspecified	Ct-7
Columbiana	Hartley Gravel	Hartley Gravel	Knox	sand—building gravel—building	Ca-H1
	Harvest Sand & Gravel, Inc.	Harvest Sand & Gravel, Inc.	Salem	sand—pipe bedding gravel—pipe bedding	Ca-H
	Inland South Aggregates	Inland South Aggregates	Middleton	sand—road construction/resurfacing gravel—road construction/resurfacing	Ca-351
	Solomon's Mines, Inc.	Solomon's Mines, Inc.	Salem	sand—building, road construction/resurfacing, fill gravel—building, road construction/resurfacing, filtration	Ca-S
	Carl Walter	Carl Walter	West	sand—bank run gravel—bank run	Ca-W
	Willowbrook Sand & Gravel	Willowbrook Sand & Gravel	Elk Run	sand—unspecified gravel—unspecified	Ca-993
	X L Sand & Gravel	X L Sand & Gravel	Middleton	sand—building gravel—building	Ca-881
Coshocton	William Albert, Inc.	William Albert, Inc. William Albert, Inc.	Franklin Lafayette	gravel—building sand—building, road construction/resurfacing, fill, unspecified gravel—building, road construction/resurfacing, filtration	Cn-828 Cn-WA
	Apache Aggregate & Paving Co.	Apache Aggregate & Paving Co.	Jackson	sand—portland cement concrete, asphaltic concrete gravel—portland cement concrete, asphaltic concrete, road construction/resurfacing	Cn-718
	Shady Bend Sand & Gravel	Shady Bend Sand and Gravel	Oxford	sand—road construction/resurfacing gravel—road construction/resurfacing	Cn-624
	Shelly Materials, Inc.	Coshocton Plant #5	Bethlehem	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Cn-694
	Walhonding Sand & Gravel	Walhonding Valley Sand & Gravel	New Castle	sand—building gravel—road construction/resurfacing	Cn-WL
Crawford	Gibson Sand & Gravel Co.	Gibson Sand & Gravel Co.	Jefferson	sand—building	Cd-G

Cuyahoga	Boyas Excavating, Inc.	Boyas Excavating, Inc.	Independence	sand—fill	Cya-42
Darke	Foureman's Sand & Gravel, Inc.	Foureman's Sand & Gravel, Inc.	Greenville	sand—unspecified gravel—unspecified	Dke-4
	Hollinger Excavating	Hollinger Gravel	Harrison	gravel—farm ballast	Dke-10
Erie	Erie Materials, Inc.	Borchardt	Groton, Margaretta	gravel—road construction/resurfacing	Ee-18
	Jarrett Sand Co.	Jarrett Sand Co.	Groton	sand—landscaping	Ee-29
Fairfield	James E. Downard	Downard Pit	Rush Creek	sand—backfill	Fd-16
	Paul D. Beery Trucking Co.	Paul D. Beery Trucking Co.	Berne	sand—unspecified gravel—unspecified	Fd-14
	Shelly Materials, Inc.	Lancaster Plant #14	Berne	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Fd-13
Franklin	Agg Rok Materials	Agg Rok	Franklin	sand—building, portland cement concrete, asphaltic concrete gravel—building, asphaltic concrete, road construction/resurfacing	Fn-36
	JP Sand & Gravel Co.	JP Sand & Gravel Co.	Hamilton	sand—unspecified gravel—unspecified	Fn-52
	Martin Marietta Aggregates	Columbus #319	Marion	sand—portland cement concrete, asphaltic concrete, construction gravel—asphaltic concrete, construction	Fn-6
		Lockbourne #213	Hamilton	sand—portland cement concrete, asphaltic concrete, construction gravel—asphaltic concrete, construction	Fn-23
	Mason's Sand & Gravel Co./ George C. Smith	Mason's Sand & Gravel Co.	Hamilton	sand—building gravel—building	Fn-11
	Olen Corp.	Columbus Plant #3	Hamilton	sand—building, portland cement concrete, asphaltic concrete gravel—building, portland cement concrete, asphaltic concrete	Fn-58
Fulton	Al Mackey Enterprises, Inc.	Mackey	Swan Creek	sand—building	Ftn-M2
	Northwest Ohio Property Developments, Ltd.	Northwest Ohio Property Developments, Ltd.	Dover	sand—bedding	Ftn-NW
	Sandman Trucking, Inc.	Sandman Trucking, Inc.	Swan Creek	sand—building	Ftn-SA
Gallia	Jaclib Enterprises, Inc.	Cheshire Pit	Cheshire	gravel—filtration	Ga-JE
	Ours Sand & Gravel	Ours Sand & Gravel	Ohio	sand—unspecified	Ga-O
Geauga	Haueter Sand & Gravel, Inc.	Haueter Sand & Gravel, Inc.	Burton, Newbury	sand—building, portland cement concrete gravel—filtration, oversize	Gea-29
		Haueter Sand & Gravel, Inc.	Auburn	sand—building gravel—building	Gea-H
	T & K Kuhnle Co.	Munn Rd. Sand & Gravel	Auburn	sand—unspecified gravel—unspecified	Gea-TK
	Solon Excavators Sand & Gravel, Inc.	May	Auburn	gravel—building, asphaltic concrete	Gea-43
	Soltis Sand & Gravel	Soltis Sand & Gravel	Parkman	sand—fill gravel—bank run	Gea-9

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Geauga (cont.)	Teague Gravel Co., Inc.	Teague Gravel Co., Inc.	Newbury	sand—building, portland cement concrete gravel—building, road construction/resurfacing, filtration	Gea-35
Greene	M. J. Coates Construction Co., Inc.	M. J. Coates Construction Co.	Spring Valley	gravel—road construction/resurfacing	Ge-47
	M. J. Coates Construction Co., Inc.	M. J. Coates Construction Co., Inc.	Spring Valley	gravel—road construction/resurfacing	Ge-G
	Hilltop Basic Resources, Inc.	Fairborn Aggregate Plant	Bath	sand—building, portland cement concrete gravel—portland cement concrete, asphaltic concrete, unspecified	Ge-4
	Martin Marietta Aggregates	Haines Rd.	Beaver Creek	sand—unspecified gravel—unspecified	Ge-32
		Spring Valley Gravel	Spring Valley	sand—unspecified gravel—unspecified	Ge-42
		Spring Valley North	Spring Valley	sand—unspecified gravel—unspecified	Ge-38
		Xenia Gravel	Beaver Creek, Xenia	sand—unspecified gravel—unspecified	Ge-33
	R.J. Martin Service & Excavating	Horseshoe Bend Sand & Gravel	Spring Valley	gravel—bank run	Ge-40
	Phillips Sand & Gravel	Phillips Sand & Gravel	Beaver Creek	sand—unspecified gravel—building	Ge-36
	Joann O. Weddle	Weddle Gravel	Xenia	sand—unspecified	Ge-W
Hamilton	Allgeier & Son, Inc.	Allgeier & Son, Inc.	Miami	sand—building gravel—building	Hmn-C
		Allgeier & Son, Inc. Pit 2	Whitewater	sand—building gravel—building	Hmn-AS
	Ashcraft Sand & Gravel, Inc.	Ashcraft Sand & Gravel, Inc.	Whitewater	sand—building gravel—building	Hmn-54
	James Bunnell, Inc.	James Bunnell, Inc.	Harrison, Whitewater	sand—unspecified gravel—unspecified	Hmn-50
		James Bunnell, Inc.	Whitewater	sand—unspecified gravel—unspecified	Hmn-59
	Joe E. Carter	Lost Bridge	Whitewater	sand—fill gravel—filtration	Hmn-JC
	Crosby Gravel, Inc.	Crosby Gravel, Inc.	Crosby	sand—golf course gravel—building	Hmn-44
	Dravo Lime, Inc.	Newtown	Anderson	sand—reclamation	Hmn-11
	Golsch Construction, Inc.	Golsch	Whitewater	gravel—fill	Hmn-G
	Harrison Sand & Gravel Co.	Harrison Sand & Gravel Co.	Harrison	sand—building, portland cement concrete, fill, ice control gravel—building, portland cement concrete, road construction/resurfacing, filtration, landscape	Hmn-17
	Martin Marietta Aggregates	Camp Dennison Gravel	Symmes	sand—unspecified gravel—unspecified	Hmn-5
		E-town Sand & Gravel	Whitewater	sand—unspecified gravel—unspecified	Hmn-71
		E-town Sand & Gravel	Miami	sand—unspecified gravel—unspecified	Hmn-P
		Harrison Sand & Gravel	Harrison	sand—unspecified gravel—unspecified	Hmn-37

	R. L., Ltd.	R. L., Ltd.	Crosby	sand—building gravel—building	Hmn-67
	Southern Ohio Aggregates, Inc.	Kilby Road	Whitewater	sand—unspecified gravel—unspecified	Hmn-SO
	Watson Gravel, Inc.	Campbell Rd.	Harrison	gravel—building	Hmn-69
		Harrison Pit	Whitewater	sand—building, portland cement concrete, asphaltic concrete, fill gravel—building, portland cement concrete, road construction/resurfacing	Hmn-60
	Welch Sand & Gravel, Inc.	East Miami Pit	Colerain	sand—building gravel—building	Hmn-48
		Fernald Pit	Crosby	sand—building gravel—building	Hmn-42
Hardin	Norman Harpster	Harpster Pit	Roundhead	gravel—unspecified	Hdn-H
Hocking	Hocking Valley Concrete, Inc.	Hocking Valley Concrete, Inc.	Green	sand—portland cement concrete, block gravel—portland cement concrete, block	Hg-262
	Kilbarger Construction, Inc.	David Sheets	Falls	sand—road construction/resurfacing gravel—road construction/resurfacing	Hg-329
	Lancaster Limestone	Lancaster Limestone	Marion	sand—bank run gravel—bank run	Hg-L
	Muskingum River Gravel Co.	S & S Aggregate #8	Green, Starr	sand—asphaltic concrete, road construction/resurfacing, unspecified gravel—building, asphaltic concrete, road construction/resurfacing, unspecified	Hg-301
Holmes	Craigton Shale Co.	Lakeville Sand & Gravel	Washington	sand—portland cement concrete gravel—building	Hs-C
	Feikert Sand & Gravel, Inc.	Feikert Sand & Gravel, Inc.	Salt Creek	sand—building, portland cement concrete, road construction/resurfacing gravel—building, portland cement concrete, road construction/resurfacing	Hs-511
	Holmes Supply Corp.	Holmes Supply Corp.	Prairie	sand—portland cement concrete, asphaltic concrete, road construction/resurfacing, fill gravel—building, asphaltic concrete, road construction/resurfacing, filtration	Hs-J
	Menuez Bros. Sand & Gravel, Inc.	Menuez Bros. Sand & Gravel, Inc.	Hardy	sand—portland cement concrete, asphaltic concrete, fill, ice control gravel—portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration, fill	Hs-82
	Spring Run Gravel	Spring Run Gravel	Killbuck	sand—unspecified gravel—unspecified	Hs-96
Huron	Erie Blacktop, Inc.	Erie Blacktop, Inc.	Norwalk	sand—building	Hrn-16
Jackson	Waterloo Coal Co., Inc.	Waterloo Coal Stone Plant-Zoar Mill	Madison	gravel—unspecified	Jkn-367
Knox	Olen Corp.	Fredericktown Plant #2	Morris	sand—portland cement concrete, asphaltic concrete gravel—building, portland cement concrete, asphaltic concrete	Kx-16
	Small's Sand & Gravel, Inc.	Small's Sand & Gravel, Inc	Howard	gravel—unspecified	Kx-S

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Knox (cont.)	Small's Sand & Gravel, Inc. (cont.)	Small's Sand & Gravel, Inc.	Harrison	sand—asphaltic concrete, unspecified gravel—asphaltic concrete, unspecified	Kx-15
		Small's Sand & Gravel, Inc.	Harrison	gravel—unspecified	Kx-17
		Small's Sand & Gravel, Inc.	Union	gravel—unspecified	Kx-5
	United Aggregates, Inc.	United Aggregates, Inc.	Clinton	sand—building gravel—building, road construction	Kx-3
Lake	C.I.R., Inc.	Harmon	Madison	gravel—fill	Lke-CIR
	R. W. Sidley, Inc.	Painesville Plant	Painesville	sand—fill, top soil	Lke-7
Lake Erie	Erie Sand & Gravel Co.	Erie Sand & Gravel Co.	Vermilion-Lorain area "A"	sand—unspecified	Le-dredge
	Osborne Materials Co.	Osborne Materials Co.	Fairport	sand—building, portland cement concrete, asphaltic concrete, fill	Lke-dredge
Lawrence	B & L Sand Co.	B & L Sand Co.	Perry	sand—building	Le-430
	Burlington Sand & Gravel Co.	Burlington Sand & Gravel Co.	Perry	sand—fill	Le-426
Licking	Eagle Material Supply Ltd.	Eagle Material Supply Ltd.	St. Albans	sand—building gravel—building	Lg-W
	Olen Corp.	St. Louisville Plant #5	Washington	sand—building, portland cement concrete, asphaltic concrete gravel—building, asphaltic concrete	Lg-31
	Gary Roberts Excavating	Gary Roberts Excavating	Madison	sand—bank run gravel—unspecified	Lg-504
	Van Wey Sand & Gravel, Inc.	Van Wey Sand & Gravel, Inc.	Newton	sand—building gravel—building	Lg-10
Logan	Boyd Excavating	Boyd Excavating	Monroe	sand—asphaltic concrete gravel—building	Lgn-B
	C. E. Duff & Son, Inc.	C. E. Duff & Son, Inc.	Lake	sand—building	Lgn-36
		Duff Sand Co.	Washington	sand—building, portland cement concrete	Lgn-31
	Neer's Sand & Gravel	Neer's Sand & Gravel	Union	sand—unspecified gravel—unspecified	Lgn-6
Lorain	Guy Schieve	Guy Schieve Pit	Henrietta	sand—building	Ln-12
Lucas	Al Mackey Enterprises, Inc.	Schaeffer Pit	Spencer	sand—building	Ls-M1
	Seaway Sand & Stone, Inc.	Seaway Sand & Stone, Inc.	Swanton	sand—unspecified	Ls-13
Madison	Tuffco Sand & Gravel, Inc.	Tuffco Sand & Gravel, Inc.	Darby	sand—unspecified gravel—unspecified	Mdn-11
Mahoning	Wallace Road Sand & Gravel	Wallace Road Sand & Gravel	Springfield	sand—unspecified	Mg-630
Marion	Fleming Construction Co., Inc.	Pit #1	Prospect	sand—portland cement concrete, mason sand gravel—fill, decorative	Mn-16
		Pit #2	Prospect	sand—fill	Mn-19

Medina	Baker Sand, Inc.	Baker Sand, Inc.	Harrisville, Westfield	sand—building, portland cement concrete gravel—road construction/resurfacing	Ma-20
	Seville Sand & Gravel, Inc.	Seville Sand & Gravel, Inc.	Harrisville, Westfield	sand—building, asphaltic concrete, fill gravel—building, road construction/resurfacing, filtration	Ma-22
Meigs	Jaymar, Inc.	Plant #4	Olive	sand—unspecified gravel—unspecified	Ms-308
	Martin Marietta Aggregates	Apple Grove Plant	Letart	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Ms-205
	Meigs County Commissioners	Meigs County Commissioners	Letart	sand—backfill gravel—road construction/resurfacing	Ms-301
	Shelly Materials, Inc.	Racine Plant #6	Letart	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Ms-298
Miami	Fenner Sand & Gravel, Inc.	Woodville Concrete Corp.	Newton	sand—unspecified gravel—unspecified	Mi-4
	Martin Marietta Aggregates	Troy Gravel	Concord	sand—unspecified gravel—unspecified	Mi-3
	New Carlisle Sand & Gravel Co.	New Carlisle Sand & Gravel Co.	Bethel	gravel—fill	Mi-501
	Tipp Stone Co., Inc.	Tipp Stone Co., Inc.	Elizabeth	gravel—fill	Mi-12
Montgomery	Barrett Paving Materials, Inc.	Barrett Paving Materials Inc.	Madison	sand—unspecified gravel—unspecified	My-B
	Carter & Carter, Inc.	Carter & Carter, Inc.	Miami	sand—road construction/resurfacing gravel—road construction/resurfacing	My-CW
	Hilltop Basic Resources, Inc.	West Carrollton Aggregate Plant	Jefferson, Miami	sand—building, portland cement concrete, asphaltic concrete, unspecified gravel—portland cement concrete, asphaltic concrete, unspecified	My-19
	Martin Marietta Aggregates	Rip Rap Rd.	Wayne	sand—unspecified gravel—unspecified	My-66
	Miller Bros. Gravel, Inc.	Miller Bros. Gravel, Inc.	Butler	sand—building, portland cement concrete, ice control, mason sand, unspecified gravel—building, portland cement concrete, road construction/resurfacing, filtration, unspecified	My-52
	Moraine Materials Co., Inc.	Moraine Materials Co., Inc. Plant 21	German	sand—unspecified gravel—unspecified	My-41
	Tipp Stone Co., Inc.	Tipp Stone Co., Inc.	Butler	gravel—fill	My-61
Morgan	Chesterhill Stone Co.	Buck Farm	Windsor	sand—unspecified gravel—unspecified	Mon-588
	Link Trucking Co., Inc.	Link Trucking Co., Inc.	Bloom	sand—building, portland cement concrete, asphaltic concrete, ice control gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Mon-L
Morrow	Chesterville Sand & Gravel Co., Inc.	Chesterville Sand & Gravel Co., Inc.	Chester	sand—building, fill gravel—building, road construction/resurfacing, filtration	Mw-10

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Muskingum	LUB, Inc.	LUB, Inc.	Muskingum	sand—pipe backfill gravel—filtration	Mum-LB
	Muskingum River Gravel Co.	S & S Aggregate #1	Wayne	sand—building, asphaltic concrete, unspecified gravel—building, asphaltic concrete, road construction/resurfacing, unspecified	Mum-228
	Shelly Materials, Inc.	Dresden Plant #9	Cass	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Mum-799
Pickaway	Darby Creek Excavating, Inc.	Darby Creek Excavating Inc.	Muhlenberg	sand—unspecified gravel—unspecified	Pky-DC
	William A. Hoffman, Jr.	Hoffman Pit	Wayne	sand—fill gravel—fill	Pky-H
	George J. Igel & Co., Inc.	Valley Sand & Gravel, Inc.	Darby	gravel—road construction/resurfacing	Pky-C
	The Melvin Stone Co., LLC	Circleville	Wayne	sand—building, portland cement concrete, asphaltic concrete gravel—building, asphaltic concrete, road construction/resurfacing, farm & residential	Pky-R
	Roy M. Roush	R Farm S & G	Darby	sand—road construction/resurfacing gravel—road construction/resurfacing	Pky-RR
	Gene T. Wilson	Gene T. Wilson	Darby	sand—building gravel—building	Pky-W
Pike	Hanson Aggregates Davon, Inc.	Piketon Sand & Gravel	Scioto	sand—unspecified gravel—unspecified	Pke-24
	South Central Sand & Gravel	South Central Sand & Gravel	Scioto	sand—portland cement concrete gravel—road construction/resurfacing	Pke-30
	Valley Materials Co.	Valley Materials #1	Scioto	sand—building, road construction/resurfacing, fill gravel—building, road construction/resurfacing, filtration	Pke-26
		Valley Materials #2	Scioto	sand—road construction/resurfacing gravel—road construction/resurfacing	Pke-V
Portage	Ballentine Excavation Co.	Ballentine Lake	Shalersville	sand—unspecified gravel—unspecified	Pe-BA
	Beck Sand & Gravel, Inc.	Beck Sand & Gravel, Inc.	Shalersville	sand—building, portland cement concrete gravel—road construction/resurfacing, filtration, roofing, landscape	Pe-50
	Blue Stone Sand & Gravel, Inc.	Blue Stone Pit #1	Mantua	sand—building, asphaltic concrete gravel—building, asphaltic concrete, landscaping	Pe-B1
	Oscar Brugmann Sand & Gravel, Inc.	Oscar Brugmann Sand & Gravel, Inc.	Shalersville	sand—unspecified	Pe-9
	R. A. Cruise Sand & Gravel, Inc.	R. A. Cruise Sand & Gravel, Inc.	Franklin, Ravenna	sand—building, asphaltic concrete gravel—building	Pe-45
	D & K Materials, Inc.	D & K Materials, Inc.	Brimfield	sand—road construction/resurfacing gravel—road construction/resurfacing	Pe-101
	GANS Ltd.	Gans Ltd. dba Brimfield Sand & Soils	Brimfield	sand—building gravel—building	Pe-102

	Hilltop Aggregate, Inc.	Hilltop Aggregate, Inc.	Suffield	sand—unspecified gravel—unspecified	Pe-56
	Hugo Sand Co.	Hugo Sand Co.	Franklin	sand—building, road construction/resurfacing, unspecified gravel—building, unspecified	Pe-10
	Janson & Sons Corp.	Janson & Sons Corp.	Mantua	sand—asphaltic concrete gravel—asphaltic concrete	Pe-J
	Jefferson Materials Co.	Jefferson Materials Co.	Streetsboro	sand—portland cement concrete, asphaltic concrete, fill gravel—portland cement concrete, asphaltic concrete	Pe-63
	Lafarge North America	Shalersville Plant-Northern Division	Shalersville	sand—building gravel—building	Pe-68
	Lakeside Sand & Gravel Co.	Lakeside Sand & Gravel Co.	Shalersville	sand—portland cement concrete gravel—building, asphaltic concrete, road construction/resurfacing, landscaping	Pe-LS
	Lucky Sand & Gravel Co.	Lucky Sand & Gravel Co.	Mantua	sand—building, fill gravel—building, road construction/resurfacing, filtration, fill	Pe-L
	Miller Sand & Gravel, Inc.	Miller Sand & Gravel, Inc.	Windham	sand—building, unspecified gravel—building, unspecified	Pe-39
	Mills Rock, Sand, & Soil, Inc.	303 Sand & Gravel	Shalersville	sand—portland cement concrete gravel—building	Pe-M
	Muskingum River Gravel Co.	S & S Agg #16	Ravenna	sand—asphaltic concrete, road construction/resurfacing, unspecified gravel—asphaltic concrete, road construction/resurfacing, unspecified	Pe-15
	Rainbow Sand & Gravel, Inc.	Rainbow Sand & Gravel, Inc.	Shalersville	sand—building, portland cement concrete gravel—building	Pe-64
	Red Brush Peat Co.	Red Brush Peat Co.	Franklin	sand—fill gravel—fill	Pe-61
	Rockwell Sand & Gravel, Inc.	Rockwell Sand & Gravel, Inc.	Streetsboro	sand—building, portland cement concrete gravel—building	Pe-85
	S & S Aggregate, Inc.	Twin Lakes-S & S Ag #10	Streetsboro	sand—unspecified	Pe-67
	Schloss Materials Co.	Schloss Materials Co.	Mantua	sand—asphaltic concrete gravel—asphaltic concrete	Pe-60
	Sober Sand & Gravel Co.	Sober Sand & Gravel Co.	Rootstown	sand—building, road construction/resurfacing, fill gravel—road construction/resurfacing	Pe-18
	Solon Excavators Sand & Gravel, Inc.	Brugman	Shalersville	sand—building, road construction/resurfacing gravel—building	Pe-S1
		Burke	Mantua, Shalersville	sand—building, asphaltic concrete gravel—building	Pe-36
	Twinsburg Development Corp.	Twinsburg Development Corp.	Aurora	sand—asphaltic concrete, fill, mason gravel—building, bank run, landscape	Pe-84
Preble	Loxley Aggregates, Inc.	Loxley Aggregates, Inc.	Twin	sand—building gravel—building	Pre-9
	Thomas Sand & Gravel	Thomas Sand & Gravel	Lanier	sand—fill gravel—road construction/resurfacing	Pre-T
	U.S. Aggregates, Inc.	U.S. Aggregates/Richmond Plant	Jefferson	sand—unspecified gravel—unspecified	Pre-AAC
	Wysong Gravel Co.	Wysong Gravel Co.	Somers	sand—building gravel—building	Pre-4
		Wysong Gravel Co.	Twin	sand—building gravel—building	Pre-6

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Richland	Bartley & Bolin Excavating	Bartley & Bolin, Inc.	Weller	gravel—bank run	Rd-20
	D. H. Bowman & Sons, Inc.	D. H. Bowman & Sons, Inc.	Jefferson	sand—asphaltic concrete, fill gravel—building, asphaltic concrete, road construction/resurfacing, filtration, private drives, ice control	Rd-4
	Ganges Gravel Co.	Ganges Gravel Co.	Cass	sand—building gravel—building	Rd-18
	John L. Garber Materials, Inc.	John L. Garber Materials, Inc.	Troy	sand—building gravel—building	Rd-14
	S & S Aggregate, Inc.	S & S Agg #14	Monroe	sand—asphaltic concrete, road construction/resurfacing, unspecified gravel—asphaltic concrete, road construction/resurfacing, unspecified	Rd-5
Ross	David E. Edgington	Edgington Pit	Concord	sand—building gravel—building	Rs-E
	Gillum Bros. Excavating	Gillum Bros. Excavating	Liberty	gravel—bank run	Rs-G
	Haubeil & Sons Asphalt & Materials, Inc.	Haubeil & Sons Asphalt & Materials, Inc.	Springfield	sand—building, portland cement concrete, asphaltic concrete gravel—asphaltic concrete, road construction/resurfacing, filtration	Rs-H
	Muskingum River Gravel Co.	S & S Aggregate Plant #7	Jefferson	sand—asphaltic concrete, road construction/resurfacing, unspecified gravel—asphaltic concrete, road construction/resurfacing, unspecified	Rs-M
	Mark E. Scott	Scott Pit	Green	sand—building gravel—building	Rs-P
	Shelly Materials, Inc.	Chillicothe Plant #21	Springfield	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Rs-27
	Tackett Builders	Tackett's Pit	Springfield	sand—building gravel—building	Rs-T
Sandusky	Precision Aggregates III, LLC	Precision Aggregates III, LLC	Sandusky	sand—portland cement concrete gravel—road construction/resurfacing	Sy-5
Scioto	ATS Enterprises	ATS Enterprises	Green	sand—building, portland cement concrete, road construction/resurfacing gravel—building, road construction/resurfacing	So-79
	D.G.M., Inc.	Tow Path Ready Mix	Morgan	sand—building, portland cement concrete gravel—building, portland cement concrete	So-DGM
	Hanson Aggregates Davon, Inc.	Scioto Valley Resources	Valley	sand—unspecified gravel—unspecified	So-100
Shelby	Barrett Paving Materials, Inc.	Jones Deposit	Washington	sand—unspecified gravel—unspecified	Shy-18
		Pence Pit	Washington	sand—unspecified gravel—unspecified	Shy-11

	Miami River Stone Co.	Miami River Stone Co.	Orange	sand—road construction/resurfacing gravel—road construction/resurfacing	Shy-17
		Staley Pit	Clinton, Salem	gravel—building	Shy-SS
	Spring Creek Corp.	Morelock Pit	Washington	sand—building, road construction/resurfacing, fill gravel—building	Shy-SC
Stark	American Sand & Gravel, Inc.	Plant 2	Jackson	sand—road construction/resurfacing gravel—road construction/resurfacing	Sk-203
		Plant 4	Jackson	sand—road construction/resurfacing gravel—road construction/resurfacing	Sk-243
	Central-Allied Enterprises, Inc.	Canton Aggregate Div.	Plain	sand—portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified gravel—portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified	Sk-681
		Central Aggregate Div.	Perry	sand—road construction/resurfacing, unspecified gravel—road construction/resurfacing, unspecified	Sk-CA
		Massillon Washed Gravel Div.	Bethlehem	sand—unspecified gravel—unspecified	Sk-607
		Massillon Washed Gravel Div.	Bethlehem	sand—unspecified gravel—unspecified	Sk-MW
	Heiser Sand & Gravel Corp.	Heiser Sand & Gravel Corp.	Jackson	sand—building gravel—building	Sk-HS1
	Massillon Materials, Inc.	Massillon Materials, Inc.	Perry	sand—asphaltic concrete, road construction/resurfacing gravel—asphaltic concrete, road construction/resurfacing	Sk-M
		MMI Warmington Plant	Perry	gravel—asphaltic concrete, road construction/resurfacing	Sk-M1
	National Aggregates, Inc.	National Aggregates, Inc.	Sandy	sand—unspecified gravel—unspecified	Sk-1017
	Northern Ohio Paving Co.	Allied Plant #3	Perry	sand—portland cement concrete, asphaltic concrete gravel—portland cement concrete, asphaltic concrete, road construction/resurfacing	Sk-N
	Oster Sand & Gravel, Inc.	Massillon Plant	Jackson, Perry	sand—building, portland cement concrete, asphaltic concrete, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified	Sk-165
		Mudbrook Plant	Jackson	sand—fill	Sk-R
Summit	Alden Sand & Gravel Co.	Alden Excavating	Northampton	sand—unspecified gravel—unspecified	St-55
	Donald A. Coy	Donald A. Coy	Norton	sand—building	St-DC
	Flesher Sand & Gravel, Inc.	Flesher Sand & Gravel, Inc.	Norton	gravel—unspecified	St-52
	Riverside Sand & Gravel Co., Inc.	Riverside Sand & Gravel Co., Inc.	Stow, Tallmadge	sand—fill gravel—fill	St-24
	S & S Aggregate, Inc.	Twin Lakes-S & S Agg #9	Coventry	sand—asphaltic concrete, road construction/resurfacing, unspecified gravel—asphaltic concrete, unspecified	St-44
Trumbull	Nick's Trucking	Nick's Trucking	Mesopotamia	sand—building	Tl-16
	Samco, Inc.	Springbrook	Mesopotamia	sand—building, portland cement concrete, asphaltic concrete, fill gravel—building	Tl-12
Tuscarawas	JBM Ltd.	State Rte. 416 Sand & Gravel	Goshen	sand—unspecified gravel—unspecified	Ts-2018

2001 OHIO DIRECTORY OF SAND AND GRAVEL MINING OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of pit	Township	Type and principal use	State mine number
Tuscarawas (cont.)	L & M Mineral Co.	Spring Industries	Goshen, Warwick	sand—building gravel—building	Ts-SI
	Massillon Materials, Inc.	MMI Sandyville Plant	Sandy	gravel—road construction/resurfacing	Ts-MM
	Newton Asphalt Paving, Inc.	516	Dover	sand—asphaltic concrete gravel—asphaltic concrete	Ts-2001
	Oster Sand & Gravel, Inc.	Oster Sand & Gravel, Inc.-Bolivar	Sandy	sand—building, portland cement concrete, asphaltic concrete, unspecified gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, unspecified	Ts-2036
	Sidco Development, Inc.	Midvale Sand & Gravel	Goshen	sand—portland cement concrete, road construction/resurfacing, fill gravel—portland cement concrete, road construction/resurfacing, block manufacturing	Ts-S2
	Soehnlen Bros. Sand & Gravel, Inc.	Soehnlen Bros. Sand & Gravel, Inc.	Wayne	sand—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, fill, industrial gravel—building, portland cement concrete, asphaltic concrete, road construction/resurfacing, filtration	Ts-1826
	Stewart & Reichman, Inc.	Stewart & Reichman, Inc.	Warwick	sand—building gravel—building	Ts-111
	Stocker Sand & Gravel Co.	Stocker Sand & Gravel Co.-Gnaden	Clay	sand—building, road construction/resurfacing gravel—building, road construction/resurfacing	Ts-69
		Stocker Sand & Gravel Co.-Island	Clay	sand—building, road construction/resurfacing gravel—building, road construction/resurfacing	Ts-125
Warren	Carl E. Oeder & Sons Sand & Gravel	Carl E. Oeder & Sons Sand & Gravel	Turtle Creek	sand—unspecified gravel—unspecified	Wan-41
	L & I Natural Resources, Inc.	L & I Pit & Mill	Union	sand—building gravel—building	Wan-50
	Little Miami Sand & Gravel	Little Miami Sand & Gravel Plant #1	Salem	sand—unspecified gravel—unspecified	
		Little Miami Sand & Gravel Plant #2	Salem	sand—unspecified gravel—unspecified	
	Martin Marietta Aggregates	Franklin Gravel	Franklin	sand—unspecified gravel—unspecified	Wan-38
	Miami View Mining Co., Ltd.	Miami View	Union	sand—bank run gravel—bank run	Wan-MV
	Morrow Gravel Co.	Morrow Plant	Salem	gravel—unspecified	Wan-M2
Washington	Atlas Towing Co.	Belpre Bank Run	Belpre	sand—bank run gravel—bank run	Wn-54
	Briggs Sand & Gravel, Inc.	Briggs Sand & Gravel, Inc.	Warren	sand—building gravel—road construction/resurfacing	Wn-508
	Chesterhill Stone Co.	Mount Farm	Waterford	sand—unspecified gravel—unspecified	Wn-C1
		Willow Island	Newport	sand—unspecified gravel—unspecified	Wn-C
	Grimes Excavating	Grimes Sand and Gravel	Grandview	sand—unspecified gravel—unspecified	Wn-1008

	Muskingum River Gravel Co.	Plant #2	Grandview	sand—unspecified gravel—asphaltic concrete, road construction/ resurfacing, unspecified	Wn-38
	Sharon Stone Co.	Belpre Sand & Gravel	Belpre	sand—road construction/resurfacing, fill gravel—road construction/resurfacing	Wn-SS
	Trout Sand & Gravel Co.	Trout Sand & Gravel Co.	Warren	sand—unspecified gravel—unspecified	Wn-510
Wayne	Buckeye Excavating Development, Inc.	Steven Steiner	Canaan	gravel—bank run	We-23
	Prairie Lane Sand & Gravel Co.	Prairie Lane Sand & Gravel Co.	Franklin	sand—building, foundry gravel—building, landscape	We-11
	Rupp Construction, Inc.	Rupp Construction, Inc.	Baughman	sand—building, portland cement concrete, asphaltic concrete gravel—building, portland cement concrete, asphaltic concrete	We-7
	Zollinger Sand & Gravel Co.	Zollinger Sand & Gravel Co.	Chippewa	sand—building, portland cement concrete gravel—fill	We-15
Williams	Andy Nixon Contractors, Inc.	Nixon Pit	Madison	sand—portland cement concrete gravel—unspecified	Ws-N
	Stoneco, Inc.	Montpelier S.-Takacs Pit	Superior	sand—unspecified gravel—unspecified	Ws-T
	Thiel Construction Co.	Thiel Construction Co.	Superior	sand—unspecified gravel—unspecified	Ws-21
	Walcottville Sand & Gravel Corp.	London Aggregates-Enon Pit	Superior	sand—unspecified gravel—unspecified	Ws-22
	Weber Sand & Gravel, Inc.	Weber Sand & Gravel, Inc.	St. Joseph	sand—building, portland cement concrete gravel—building, fill	Ws-11
Wood	Precision Aggregate, Inc.	Precision Aggregate II	Portage	sand—portland cement concrete gravel—portland cement concrete	Wd-14
Wyandot	JALIP, LTD.	JALIP, LTD.	Pitt	sand—bedding	Wt-J
	Kirby's Sand & Gravel, Inc.	Kirby's Sand & Gravel, Inc.	Crane, Eden	sand—building, fill gravel—building, filtration	Wt-17
	National Lime & Stone Co.	Upper Sandusky Plant	Eden	sand—building, portland cement concrete, asphaltic concrete gravel—fill	Wt-15
	Precision Aggregate, Inc.	Precision Aggregate I	Eden	sand—portland cement concrete gravel—building	Wt-4

2001 SANDSTONE/CONGLOMERATE COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
Best Sand Corp.	2	815,864	875,221
Briar Hill Stone Co.	6	26,162	26,162
City Stone LLC	1	160,000	240,000
Cleveland Quarries/American Stone Corp.	1	6,878	6,878
D. & D. Mining Co.	1	680	680
E. A. Construction, Inc.	1	40,797	40,797
J. L. & Son Excavating, Inc.	1	1,500	1,500
Keeney Sand & Stone, Inc.	1	84,352	84,352
Mesenburg Bros., Inc.	1	3,716	3,716
Mt. Eaton Reclamation, Inc.	1	35,776	35,776
Oglebay Norton Industrial Sands, Inc.	2	308,456	308,456
Oscar Brugmann Sand & Gravel, Inc.	1	35,639	36,200
Pine Grove Regional Facility	1	27,000	27,000
R. W. Sidley, Inc.	2	120,450	150,450
Riverside Sand & Gravel Co., Inc.	1	3,196	3,196
Samco, Inc.	1	525	525
Schrader and Son, Inc.	1	33,327	33,327
Sidwell Materials, Inc.	1	10,219	10,219
Solomon's Mines, Inc.	1	27,974	27,974
U.S. Silica Co.	1	12,750	15,000
Waller Bros. Stone Co.	2	13,440	13,440
TOTAL: 21 companies	30	1,768,701	1,940,869

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Gea-N).

County	Name of operator	Name of quarry	Township	Geological unit	Type and principal use	State mine number
Belmont	Sidwell Materials, Inc.	Bellaire Stone	Pultney	Pennsylvanian	crushed or broken stone—riprap	Bt-1190
Columbiana	D. & D. Mining Co.	D. & D. Strip	Unity		crushed or broken stone	Ca-888
	Solomon's Mines, Inc.	Solomon's Mines, Inc.	Salem		crushed or broken stone—riprap, aggregate	Ca-S
Coshocton	Briar Hill Stone Co.	Quarry #26	Monroe	Massillon (Pennsylvanian)	dimension stone—rough construction	Cn-13
		Quarry #32	Monroe	Massillon (Pennsylvanian)	dimension stone—rough construction	Cn-686
		Quarry #54	Monroe	Massillon (Pennsylvanian)	dimension stone—rough construction	Cn-809
		Quarry #55	Monroe	Massillon (Pennsylvanian)	dimension stone—rough construction	Cn-815
		Quarry #3	Tiverton	Massillon (Pennsylvanian)	dimension stone—rough construction	Cn-659
Erie	Cleveland Quarries/American Stone Corp.	Birmingham Quarry	Florence	Berea (Mississippian)	dimension stone—rough construction, rubble, finished stone	Ee-21
Fairfield	Pine Grove Regional Facility	Pine Grove Regional Facility	Clear Creek, Madison	Cuyahoga (Mississippian)	crushed or broken stone—other	Fd-PG
Geauga	Best Sand Corp.	Best Sand Corp.	Munson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone—foundry sand, glass sand, metallurgical pebble, refractory, polishing/ grinding sand, engine sand, construction, industrial sand	Gea-3
Geauga	R. W. Sidley, Inc.	Hambden Pit	Hambden	Sharon conglomerate (Pennsylvanian)	crushed or broken stone—construction	Gea-S
		Thompson Pit	Thompson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone—aggregate, construction	Gea-1
Huron	Mesenburg Bros., Inc.	Mesenburg Bros., Inc.	Townsend	Berea (Mississippian)	dimension stone—rough construction	Hrn-8
Knox	Briar Hill Stone Co.	Quarry #6	Jefferson	Massillon (Pennsylvanian)	dimension stone—rough construction	Kx-12
	Oglebay Norton Industrial Sands, Inc.	Millwood Plant	Butler, Union	Black Hand (Mississippian)	crushed or broken stone—glass sand, silica flour, engine sand, industrial sand	Kx-1
Lake	Keeney Sand & Stone, Inc.	Keeney Sand & Stone, Inc.	Leroy	Berea (Mississippian)	crushed or broken stone—aggregate, construction	Lke-K
Perry	Oglebay Norton Industrial Sands, Inc.	Glass Rock Plant	Hopewell	Massillon (Pennsylvanian)	crushed or broken stone—glass sand, refractory sand, silica flour	Py-344
Pike	Best Sand Corp.	Best Sand Corp.	Jackson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone—foundry sand, glass sand, metallurgical pebble, refractory sand, polishing/ grinding sand, engine sand, construction, industrial sand	Pke-31
	Schrader and Son, Inc.	Schrader & Son, Inc.	Jackson	Sharon conglomerate (Pennsylvanian)	crushed or broken stone—foundry sand	Pke-S
Portage	Oscar Brugmann Sand & Gravel, Inc.	Oscar Brugmann Sand & Gravel, Inc.	Shalersville		crushed or broken stone—unspecified	Pe-9
Scioto	Waller Bros. Stone Co.	Crabtree Quarry	Union	Buena Vista (Mississippian)	dimension stone—rough construction	So-76
		New Inskeep	Rush	Buena Vista (Mississippian)	dimension stone—rough construction	So-W
Summit	Riverside Sand & Gravel Co., Inc.	Riverside Sand & Gravel Co., Inc.	Stow, Tallmadge		crushed or broken stone—riprap	St-24
Trumbull	City Stone LLC	City Stone LLC	Brookfield		crushed or broken stone—aggregate, construction	Tl-CA
	Samco, Inc.	Springbrook	Mesopotamia		crushed or broken stone—unspecified dimension stone—unspecified	Tl-12
Tuscarawas	J. L. & Son Excavating, Inc.	Beach City Pit	Franklin		crushed or broken stone—unspecified	Ts-2032
	U.S. Silica Co.	Dundee Mine	Wayne	Massillon (Pennsylvanian)	crushed or broken stone—foundry sand	Ts-1660
Wayne	E. A. Construction, Inc.	#1	Clinton		crushed or broken stone—unspecified	We-EA
	Mt. Eaton Reclamation, Inc.	Mt. Eaton Reclamation, Inc.	Paint	Middle Kittanning (Pennsylvanian)	crushed or broken stone—unspecified	We-26

2001 CLAY COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
Athens Hocking Reclamation Center	1	1,025	1,025
Bearcreek Clay Co.	2	30,463	30,463
Belden Brick Co.	4	254,668	254,668
Blue Jay Enterprises of Ts. Co., Inc.	2	18,855	18,855
Bowerston Shale Co.	1	16,559	16,559
Boyas Excavating, Inc.	1	30,489	30,489
Browning-Ferris Industries of Ohio, Inc.	1	153,177	153,177
Buckeye Industrial Mining Co.	4	177,245	177,237
Cedar Heights Clay Co.	1	44,989	44,989
Cherokee Run Landfill	1	120,923	120,923
Cochran Transportation Services, Inc.	1	35	35
D. & D. Mining Co.	1	3,138	3,138
E. A. Construction, Inc.	1	4,155	4,155
ENZ, Inc.	1	109,087	109,087
ESSROC Cement Corp.	1	16,864	16,864
East Fairfield Coal Co.	1	4,428	4,428
Envirosafe Services of Ohio, Inc.	1	69,255	69,255
Harvest Sand & Gravel, Inc.	1	285	314
Holmes Limestone Co.	2	23,384	23,384
Honey Creek Stone Co.	1	63,036	63,036
L & M Mineral Co.	1	9,350	9,350
Lafarge Corp.	1	132,036	132,036
Laidlaw Waste Systems (Celina), Inc.	1	20,725	20,725
Loxley Aggregates, Inc.	1	1,696	1,696
Luburgh Inc.	1	34,500	34,500
Andy Nixon Contractors, Inc.	1	145	145
Nuway Services, Inc.	1	60,650	60,650
Patrick Excavating, Inc.	1	2,186	2,186
Pine Grove Regional Facility	1	33,335	33,335
Rumpke Waste, Inc.	1	51,161	51,161
Sandkuhl Clay Works, Inc.	1	5,554	5,554
Joe Simak & Sons Trucking, Inc.	1	9,505	9,505
Soltis Sand & Gravel	1	728	728
Southdown Inc.	1	396	396
State Line Resources, Inc.	1	77,531	77,531
Stone Creek Brick Co.	1	38,420	38,420
Tuffco Sand & Gravel, Inc.	1	32	32
Valley Clay Mining Co.	2	17,467	17,467
Waterloo Coal Co., Inc.	1	3,116	3,116
Joann O. Weddle	1	89,558	89,558
TOTAL: 40 companies	50	1,730,151	1,730,172

2001 OHIO DIRECTORY OF CLAY-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Cn-B).

County	Name of operator	Name of mine or quarry	Township	Geological unit	Principal use	State mine number
Ashtabula	Joe Simak & Sons Trucking, Inc.	North Ridge Pit	Kingsville		construction	Asa-18
Athens	Athens Hocking Reclamation Center	Athens Hocking Reclamation Center	York		well plugging	As-594
	Cochran Transportation Services, Inc.	Circle Hill Sand & Gravel, Inc.	Dover		unspecified	As-595
Auglaize	Sandkuhl Clay Works, Inc.	Sandkuhl Clay Works, Inc.	Salem	Pleistocene	common clay products	Ae-7
Brown	Rumpke Waste, Inc.	Rumpke Waste, Inc.	Pleasant		landfill	Bn-W
Columbiana	Buckeye Industrial Mining Co.	Clay	Madison		vitrified products	Ca-BIM
		West Point	Madison		landfill	Ca-987
	D. & D. Mining Co.	D. & D. Strip	Unity		cement manufacture	Ca-348
	Harvest Sand & Gravel, Inc.	Harvest Sand & Gravel, Inc.	Salem		construction	Ca-H
	State Line Resources, Inc.	State Line Resources, Inc.	Middleton	Lower Kittanning (Pennsylvanian)	common clay products	Ca-505
Cuyahoga	Boyas Excavating, Inc.	Boyas Excavating, Inc.	Independence		common clay products	Cya-42
Fairfield	Pine Grove Regional Facility	Pine Grove Regional Facility	Clear Creek, Madison		landfill	Fd-PG
Geauga	Soltis Sand & Gravel	Soltis Sand & Gravel	Parkman		construction	Gea-9
Greene	Joann O. Weddle	Weddle Gravel	Xenia		unspecified	Ge-W
	Southdown Inc.	Miller et al.	Bath		cement manufacture	Ge-8
Holmes	Holmes Limestone Co.	241 Plant	Hardy	Putnam Hill (Pennsylvanian)	common clay products	Hs-67
Jackson	Cedar Heights Clay Co.	Harrison	Madison	Lower Kittanning (Pennsylvanian)	common clay products	Jkn-CH2
	Waterloo Coal Co., Inc.	Waterloo Coal Stone Plant-Zoar Mill	Madison	Pennsylvanian	unspecified	Jkn-367
Licking	Nuway Services, Inc.	Hopewell	McKean	Pleistocene	landfill	Lg-NU
Logan	Cherokee Run Landfill	Cherokee Run Landfill	Lake, Rush Creek		landfill	Lgn-C
Lucas	Envirosafe Services of Ohio, Inc.	Johlin Property Clay Mine	Oregon		landfill	Ls-E
Madison	Tuffco Sand & Gravel, Inc.	Tuffco Sand & Gravel, Inc.	Darby	Pleistocene	unspecified	Mdn-11
Mahoning	ESSROC Cement Corp.	Bessemer Pit	Poland		cement manufacture	Mg-608
	East Fairfield Coal Co.	Withers-Petersburg	Springfield	Lower Kittanning (Pennsylvanian)	refractories	Mg-631
	Honey Creek Stone Co.	Honey Creek Stone Co.	Springfield		unspecified	Mg-54
Mercer	Laidlaw Waste Systems (Celina), Inc.	Laidlaw Waste Systems (Celina), Inc.	Franklin		landfill	Mr-C
Muskingum	Bowerston Shale Co.	Frazeysburg	Jackson	Flint Ridge & Middle Mercer (Pennsylvanian)	common clay products	Mum-776
	Luburgh Inc.	Luburgh Clay Pit	Monroe		landfill	Mum-L
	Valley Clay Mining Co.	Spring Mine	Newton	Tionesta (Pennsylvanian)	common clay products	Mum-904
Ottawa	Browning-Ferris Industries of Ohio, Inc.	Ottawa County Landfill	Erie		landfill	Oa-BF
Paulding	Lafarge Corp.	Paulding Quarry	Crane		cement manufacture	Pg-1

2001 OHIO DIRECTORY OF CLAY-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY (cont.)

County	Name of operator	Name of mine or quarry	Township	Geological unit	Principal use	State mine number
Perry	Bearcreek Clay Co.	Dutch Ridge Rd.	Monday Creek		common clay products	Py-338
		Nelson/Common	Clayton	Middle Kittanning (Pennsylvanian)	common clay products	Py-D1
	Valley Clay Mining Co.	Tague Mine	Harrison	Lower Kittanning (Pennsylvanian)	common clay products	Py-V
Portage	Patrick Excavating, Inc.	Patrick	Charlestown		construction	Pe-P
Preble	Loxley Aggregates, Inc.	Loxley Aggregates, Inc.	Twin	Pleistocene	construction	Pre-9
Stark	Buckeye Industrial Mining Co.	Baird	Paris		vitrified products	Sk-B4
		Close	Pike	Lower Kittanning (Pennsylvanian)	vitrified products	Sk-B
	ENZ, Inc.	Sickafoose Pit	Pike, Sandy		landfill	Sk-208
	Holmes Limestone Co.	Bolivar	Bethlehem	Brookville (Pennsylvanian)	common clay products	Sk-235
Tuscarawas	Belden Brick Co.	Belden Pit	Sugar Creek	Brookville, Lower Kittanning & Tionesta (Pennsylvanian)	common clay products	Ts-1646
		Moomaw Pit	Sugar Creek	Brookville & Tionesta (Pennsylvainian)	common clay products	Ts-1517
		Shanesville Pit	Sugar Creek	Brookville (Pennsylvanian)	common clay products	Ts-1939
		Wallick Pit	Franklin, Wayne	Brookville & Lower Kittanning (Pennsylvanian)	common clay products	Ts-1841
	Blue Jay Enterprises of Ts. Co., Inc.	Blue Jay #1	Sandy	Brookville & Tionesta (Pennsylvanian)	common clay products	Ts-BJ
		Swonger Waltz Mine	Sandy	Brookville & Tionesta (Pennsylvanian)	common clay products	Ts-520
	L & M Mineral Co.	Luikart	Mill, Warwick		common clay products	Ts-1914
	Stone Creek Brick Co.	Stone Creek Brick Clay Mine	Jefferson		vitrified products	Ts-1557
Wayne	E. A. Construction, Inc.	#1	Clinton		construction	We-EA
Williams	Andy Nixon Contractors, Inc.	Nixon Pit	Madison		common clay products	Ws-N

The mine openings at the East Fairfield Coal Co. underground limestone mine in Mahoning County. The entry portal is on the right and the exit portal for the belt carrying aggregate from the mine to the processing plant is on the left.

2001 SHALE COMPANIES WITH SALES OR PRODUCTION

Company	No. of operations	Sales (tons)	Production (tons)
Barrett Paving Materials, Inc.	1	852	852
Bearcreek Clay Co.	2	41,710	41,710
Belden Brick Co.	4	207,138	207,138
Blue Jay Enterprises of Ts. Co., Inc.	2	9,386	9,386
Bowerston Shale Co.	2	51,235	51,235
Carlisle Equipment Group L.P.	1	12,000	12,000
Dome Minerals, Inc.	1	28,253	28,253
ESSROC Cement Corp.	1	66,174	66,174
Glen-Gery Corp.	1	207,762	207,762
Holmes Limestone Co.	2	41,682	41,682
Hydraulic Press Brick Co.	1	245,658	212,358
Janson's Soil Service, Inc.	1	200	200
Knox County Board of Commissioners	1	2,700	2,700
L & M Mineral Co.	1	51,242	51,242
Richland Moulded Brick Co.	1	15,189	15,189
Rumpke Mountain Mining Co.	1	430,201	430,201
Rumpke Waste, Inc.	1	49,113	49,113
Samco, Inc.	1	25,000	25,000
Sidwell Materials, Inc.	1	171	171
Stone Creek Brick Co.	1	5,500	5,500
Summitville Tiles, Inc.	1	36,180	36,180
Towne Square Products	1	160	160
Walhonding Sand & Gravel	1	561	561
TOTAL: 23 companies	30	1,528,067	1,494,767

2001 OHIO DIRECTORY OF SHALE-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

For those mines for which a state mine number has not been assigned, a letter designation is used (example: Kx-K).

County	Name of operator	Name of mine	Township	Geological unit	Principal use	State mine number
Ashtabula	Janson's Soil Service, Inc.	Janson's Soil Service, Inc.	Morgan		lightweight aggregate	Asa-14
Belmont	Sidwell Materials, Inc.	Bellaire Stone	Pultney	Pennsylvanian	construction	Bt-1190
Brown	Rumpke Waste, Inc.	Rumpke Waste, Inc.	Pleasant	upper Ordovician	landfill	Bn-W
Columbiana	Summitville Tiles, Inc.	Summitville Tiles, Inc.	Franklin		common clay products	Ca-205
	Dome Minerals, Inc.	Dome Minerals, Inc.	Franklin		brick pavers	Ca-947
Coshocton	Walhonding Sand & Gravel	Walhonding Valley Sand & Gravel	New Castle		lightweight aggregate	Cn-WL
Cuyahoga	Hydraulic Press Brick Co.	Hydraulic Press Brick Co.	Independence	Chagrin (Devonian)	lightweight aggregate	Cya-19
Hamilton	Rumpke Mountain Mining Co.	Rumpke Mountain Mining Co.	Colerain	upper Ordovician	landfill	Hmn-72
	Carlisle Equipment Group L.P.	Landmark Baptist Temple	Springfield		construction	Hmn-CE
Harrison	Bowerston Shale Co.	Bowerston	Monroe	Conemaugh Group (Pennsylvanian)	common clay products	Hn-152
Holmes	Holmes Limestone Co.	241 Plant	Hardy	Pennsylvanian	common clay products	Hs-67
Knox	Knox County Board of Commissioners	Apple Valley	Brown		landfill	Kx-K
Licking	Bowerston Shale Co.	Hanover	Hanover	Logan Formation (Mississippian)	common clay products	Lg-501
Lucas	Barrett Paving Materials, Inc.	Sylvania Quarry	Sylvania	Silica Formation (Devonian)	construction	Ls-12
Mahoning	ESSROC Cement Corp.	Bessemer Pit	Poland	Pennsylvanian	cement manufacture	Mg-608
Marion	Glen-Gery Corp.	Iberia Quarry	Tully	Bedford (Mississippian)	common clay products	Mn-7
Noble	Towne Square Products	Towne Square Products	Buffalo		common clay products	Ne-66
Perry	Bearcreek Clay Co.	Dutch Ridge Rd.	Monday Creek		common clay products	Py-338
		Nelson/Common	Clayton	Middle Kittanning (Pennsylvanian)	common clay products	Py-D1
Richland	Richland Moulded Brick Co.	Richland Moulded Brick Co.	Franklin, Weller	Cuyahoga Formation (Mississippian)	common clay products	Rd-R
Trumbull	Samco, Inc.	Springbrook	Mesopotamia		lightweight aggregate	Tl-12
Tuscarawas	Belden Brick Co.	Moomaw Pit	Sugar Creek	Brookville & Tionesta (Pennsylvanian)	common clay products, landfill	Ts-1517
		Belden Pit	Sugar Creek	Pennsylvanian	common clay products	Ts-1646
		Wallick Pit	Franklin, Wayne	Brookville & Lower Kittanning (Pennsylvanian)	landfill	Ts-1841
		Shanesville Pit	Sugar Creek	Brookville (Pennsylvanian)	common clay products, landfill	Ts-1939
	Blue Jay Enterprises of Ts. Co., Inc.	Swonger Waltz Mine	Sandy	Brookville & Tionesta (Pennsylvanian)	common clay products	Ts-520
		Blue Jay #1	Sandy	Brookville & Tionesta (Pennsylvanian)	common clay products	Ts-BJ
	Holmes Limestone Co.	L&M Rainsburg	Rush	Pennsylvanian	common clay products	Ts-H1
	L & M Mineral Co.	Evans, Heil	Rush		common clay products	Ts-1884
	Stone Creek Brick Co.	Stone Creek Brick Shale Pit	Jefferson		vitrified products	Ts-1558

2001 OHIO DIRECTORY OF SALT-MINE AND SALT-BRINING-PLANT OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

County	Name of operator	Name of mine	Township	Geological unit and product	State mine number
Cuyahoga	Cargill Incorporated	Cargill Salt, Inc.	City of Cleveland	Salina (Silurian)—rock salt	Cya-30
Lake	Morton International, Inc.	Fairport Mine	Painesville	Salina (Silurian)—rock salt	Lke-6
Licking	R. H. Penick Co.	R. H. Penick Co.	Newark	"Newburg" (Silurian)—natural brine	Lg-45
Summit	Cargill Incorporated	Cargill Incorporated	Coventry	Salina (Silurian)—artificial brine	St-9127
Wayne	Morton International, Inc.	Morton Salt Well Field	Milton	Salina (Silurian)—artificial brine	We-9129

2001 OHIO DIRECTORY OF GYPSUM-MINE OPERATORS REPORTING SALES OR PRODUCTION

County	Name of operator	Name of mine	Township	Geological unit	State mine number
Ottawa	BPB-Celotex	American #2	Portage	Silurian	Oa-2

2001 OHIO DIRECTORY OF PEAT-MINE OPERATORS REPORTING SALES OR PRODUCTION, BY COUNTY

County	Name of operator	Name of mine	Township	Type and principal use	State mine number
	No peat sales or production in 2001				

Size no. 8 ($^{3}/_{32}$ inch to $^{3}/_{8}$ inch) aggregate is washed on the secondary screen at the East Fairfield Coal Co. processing plant in Mahoning County. The no. 8's are double washed to assure quality in the final product.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

COAL ● ○

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
3	Belmont	Bt-68	D-0360	Ohio Valley Coal Co.
27	Belmont	Bt-1074	D-0340	Ohio River Collieries, Inc.
57	Belmont	Bt-P	D-0500	Marietta Coal Co.
150	Harrison	Hn-700	D-51, D-54, D-334, D-414, D-784	CONSOL Energy, Inc.
165	Jackson	Jkn-367	D-0594, D-968, D-1083, D-1167, D- 2059	Waterloo Coal Co., Inc.
213	Meigs	Ms-294	D-0355	Southern Ohio Coal Co., CONSOL Energy, Inc.
228	Morgan, Noble	Ne-41	D-0678, D-1034, D-1084, D-2047	Central Ohio Coal Co., CONSOL Energy, Inc.
246	Stark	Sk-208	D-1015	ENZ, Inc.
261	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
262	Tuscarawas	Ts-1727	IM-9	Kimble Clay & Limestone Co.
267	Tuscarawas	Ts-1914	D-0701	L & M Mineral Co.
300	Meigs	Ms-293	D-0354, D-0463	Southern Ohio Coal Co., CONSOL Energy, Inc.
357	Vinton	Vn-172	D-0445	Waterloo Coal Co., Inc.
363	Stark	Sk-235	D-0865	Holmes Limestone Co.
420	Vinton	Vn-184	D-0609	Waterloo Coal Co., Inc.
424	Belmont	Bt-1150	D-0478, D-0597	Marietta Coal Co.
441	Columbiana	Ca-348	D-1002	D. & D. Mining Co.
493	Washington	Ne-1008	D-0706	B & N Coal, Inc.
514	Noble	Ne-151	D-0807	B & N Coal, Inc.
567	Belmont	Bt-1186	D-0877	Oxford Mining Co., Inc.
580	Harrison	Hn-710	D-0426	Harrison Mining Corp., AEP Ohio Coal, L.L.C.
598	Tuscarawas	Ts-2019	D-0852	Kimble Clay & Limestone Co.
602	Vinton	Vn-191	D-0867, D-0957, D-1004	Waterloo Coal Co., Inc.
603	Belmont	Bt-1190	IM-1089, D-1061	Sidwell Materials, Inc.
625	Mahoning	Mg-608	IM-4	ESSROC Cement Corp.
627	Noble	Ne-155	D-0958	B & N Coal, Inc.
657	Jefferson	Jfn-823	D-0949	Sterling Mining Co.
667	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
683	Belmont	Bt-B	D-0998	Sidwell Materials, Inc.
696	Guernsey	Gy-318	D-1025	Valley Mining, Inc.
709	Jefferson	Jfn-831	D-1026	Valley Mining, Inc.
720	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.
723	Tuscarawas	Ts-2043	D-1047	Holmes Limestone Co.
732	Belmont	Bt-VM	D-1059	Valley Mining, Inc.
758	Jefferson	Jfn-ST	D-1019	Sterling Mining Co.
760	Noble	Ne-BN	D-1038	B & N Coal, Inc.
764	Perry	Py-O	D-1086	Oxford Mining Co., Inc.
784	Tuscarawas	Ts-K4	D-1079	Kimble Clay & Limestone Co.
787	Gallia	Ga-629	D-1095	Sands Hill Coal Co., Inc.
790	Columbiana	Ca-1003	D-0928	Buckeye Industrial Mining Co.
795	Harrison	Hn-767	D-1124	Schiappa Coal Co., Inc.
796	Jefferson	Jfn-K	IM-1164	K.C.C.I.
799	Noble	Ne-BN2	D-1122	B & N Coal, Inc.
802	Stark	Sk-B	D-1123	Buckeye Industrial Mining Co.
810	Belmont	Bt-1171	D-0674	Marietta Coal Co.
812	Belmont	Bt-M4	D-1135	Marietta Coal Co.
825	Jackson	Jkn-S3	D-1137	Sands Hill Coal Co., Inc.
826	Jefferson	Jfn-FM	D-1147	F. & M. Coal Co.
828	Tuscarawas	Ts-BJ	IM-1285	Blue Jay Enterprises of Ts. Co., Inc.
830	Tuscarawas	Ts-K5	D-1133	Kimble Clay & Limestone Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

COAL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
832	Belmont	Bt-BE	D-1159	Bennoc, Inc.
833	Belmont	Bt-M7	D-1171	Marietta Coal Co.
841	Holmes	Hs-H1	D-1176	Holmes Limestone Co.
843	Jackson, Vinton	Jkn-S2	D-1087	Sands Hill Coal Co., Inc.
844	Jefferson	Jfn-AN	D-1173	Anthony Mining Co., Inc.
846	Mahoning	Mg-E	IM-1103	East Fairfield Coal Co.
850	Tuscarawas	Ts-H4	D-1149	Holmes Limestone Co.
851	Athens	As-B	D-1163	Buckingham Coal Co., Inc.
852	Belmont	Bt-M8	D-1190	Marietta Coal Co.
854	Carroll	Cl-M2	D-2014	Myers Mining
855	Columbiana	Ca-505	IM-13, IM-936	State Line Resources, Inc.
856	Columbiana	Ca-B1	D-2003	Buckeye Industrial Mining Co.
860	Harrison	Hn-D	D-1181	Daron Coal Co., Inc.
861	Harrison	Hn-SM	D-1186	Schaney Mining
862	Jackson	Jkn-S4	D-2009	Sands Hill Coal Co., Inc.
863	Jefferson	Jfn-V2	D-1185	Varkony Mining Co.
864	Mahoning	Mg-T	D-1168	Thompson Bros. Mining Co.
866	Noble	Ne-BN3	D-1194	B & N Coal, Inc.
868	Tuscarawas	Ts-K6	D-1183	Kimble Clay & Limestone Co.
869	Vinton	Vn-S2	D-1193	Sands Hill Coal Co., Inc.
870	Belmont	Bt-M9	D-2075	Marietta Coal Co.
871	Belmont	Bt-MC	D-2055	Marietta Coal Co.
872	Belmont	Bt-MC1	D-2077	Marietta Coal Co.
873	Carroll	Cl-S	D-2070	Sterling Mining Co.
874	Coshocton	Cn-HL1	D-2019	Holmes Limestone Co.
875	Gallia	Ga-SH	D-2018	Sands Hill Coal Co., Inc.
876	Jefferson	Jfn-BI	D-1180	Buckeye Industrial Mining Co.
877	Stark	Sk-B2	D-2048	Buckeye Industrial Mining Co.
878	Stark	Sk-B3	D-2062	Buckeye Industrial Mining Co.
879	Stark	Sk-H1	D-2011	Holmes Limestone Co.
880	Tuscarawas	Ts-F	D-1189	Franklin Mineral
881	Tuscarawas	Ts-H5	D-0533	Holmes Limestone Co.
883	Vinton	Vn-S3	D-2058	Sands Hill Coal Co., Inc.
884	Belmont	Bt-C2	D-2028	Cravat Coal Co.
885	Belmont	Bt-OX	D-0676	Oxford Mining Co., Inc.
886	Harrison	Hn-OX	D-2022	Oxford Mining Co., Inc.
887	Muskingum	Mum-OX	D-1196	Oxford Mining Co., Inc.
888	Tuscarawas	Ts-H6	D-1188	Kimble Clay & Limestone Co.
889	Tuscarawas	Ts-V2	D-2013	Valley Mining, Inc.
890	Belmont	Bt-67	D-0425	American Energy Corp.
891	Belmont	Bt-C3	D-2087	Cravat Coal Co.
892	Belmont	Bt-M10	D-2124	Marietta Coal Co.
893	Belmont	Bt-OX1	D-0680	Oxford Mining Co., Inc.
894	Belmont	Bt-OX2	D-2122	Oxford Mining Co., Inc.
895	Columbiana	Ca-CE2	D-2097	C & E Coal, Inc.
896	Columbiana	Ca-S1	D-2063	State Line Resources, Inc.
897	Carroll	Cl-B2	D-2103	Buckeye Industrial Mining Co.
898	Coshocton	Cn-H2	D-2115	Holmes Limestone Co.
899	Harrison	Hn-CON	D-2100	CONSOL Energy, Inc.
900	Harrison	Hn-C4	D-2131	Cravat Coal Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

COAL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
901	Belmont, Harrison	Hn-O	D-2121	Oxford Mining Co., Inc.
902	Harrison	Hn-SC	D-1151	Schaney Mining
903	Jefferson	Jfn-C	D-2095	Cravat Coal Co.
904	Jefferson	Jfn-V1	D-1156	Valley Mining, Inc.
905	Muskingum	Mum-OX1	D-2008	Oxford Mining Co., Inc.
906	Muskingum	Mum-OX2	D-2110	Oxford Mining Co., Inc.
907	Stark	Sk-B5	D-2096	Buckeye Industrial Mining Co.
908	Stark	Sk-B6	D-2129	Buckeye Industrial Mining Co.
909	Tuscarawas	Ts-K7	D-2079	Kimble Clay & Limestone Co.
910	Tuscarawas	Ts-M	D-2066	Marietta Coal Co., Kimble Clay & Limestone Co.
911	Vinton	Vn-S4	D-2114	Sands Hill Coal Co., Inc.

COAL-PREPARATION PLANTS ◐

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
3	Belmont	Bt-936	D-0216	Marietta Coal Co.
4	Belmont	Bt-68	D-0360	Ohio Valley Coal Co.
5	Columbiana	Ca-879	D-0806	Buckeye Industrial Mining Co.
7	Coshocton	Cn-810	D-0599	Conesville Coal Preparation Co.
10	Jackson	Jkn-367	D-0285	Waterloo Coal Co., Inc.
14	Meigs	Ms-293	D-0354	Southern Ohio Coal Co., CONSOL Energy, Inc.
16	Morgan	Ne-41	D-0420	Central Ohio Coal Co., CONSOL Energy, Inc.
20	Tuscarawas	Ts-1938	D-0264	Central Fuel Co.
21	Tuscarawas	Ts-1942	D-0287	Holmes Limestone Co.
24	Vinton	Vn-641	D-0169	Sands Hill Coal Co., Inc.
30	Harrison	Hn-169	D-0424	Harrison Processing Corp., AEP Ohio Coal, L.L.C.
32	Tuscarawas	Ts-HC	D-0981	Holmes Limestone Co.
33	Columbiana	Ca-505	D-0223	State Line Resources, Inc.

LIMESTONE/DOLOMITE ■

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
1	Adams	Ads-1	IM-237	Hanson Aggregates Davon, Inc.
3	Allen	An-1	IM-485	Bluffton Stone Co.
5	Allen	An-3	IM-484	National Lime & Stone Co.
7	Allen	An-4	IM-491	Suever Stone Co., Inc.
9	Athens	As-533	IM-17	Waterloo Coal Co., Inc.
10	Auglaize	Ae-31	IM-744	Con-Ag, Inc.
11	Auglaize	Ae-10	IM-486	National Lime & Stone Co.
12	Belmont	Bt-716	IM-1	Ayers Limestone Quarry, Inc.
17	Clinton	Cln-1	IM-241	The Melvin Stone Co., LLC
18	Crawford	Cd-1	IM-404	National Lime & Stone Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

LIMESTONE/DOLOMITE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
19	Darke	Dke-1	IM-362	Martin Marietta Aggregates
20	Delaware	Del-4	IM-262	Martin Marietta Aggregates
21	Delaware	Del-5	IM-207	National Lime & Stone Co.
22	Delaware	Del-3	IM-327	Martin Marietta Aggregates
23	Delaware	Del-2	IM-299	Martin Marietta Aggregates
24	Erie	Ee-27	IM-608	Erie Blacktop, Inc.
25	Erie	Ee-11	IM-263	Hanson Aggregates Midwest, Inc.
26	Erie	Ee-1	IM-310	Wagner Quarries Co.
27	Fayette	Fe-2	IM-169	Martin Marietta Aggregates
28	Fayette	Fe-1	IM-831	The Melvin Stone Co., LLC
30	Franklin	Fn-2	IM-261	Martin Marietta Aggregates
31	Franklin	Fn-53	IM-185	Martin Marietta Aggregates
32	Greene	Ge-17	IM-435	Martin Marietta Aggregates
34	Greene	Ge-9	IM-364	Southdown Inc.
38	Hardin	Hdn-2	IM-443	Shelly Materials, Inc.
41	Highland	Hd-2	IM-230	Hanson Aggregates Davon, Inc.
42	Highland	Hd-3	IM-253	Ohio Asphaltic Limestone Corp.
43	Highland	Hd-4	IM-406	Marshall Quarry, Inc.
44	Holmes	Hs-67	IM-3, IM-768	Holmes Limestone Co.
47	Jackson	Jkn-367	D-594, D-968, D-1083	Waterloo Coal Co., Inc.
49	Logan	Lgn-1	IM-574	Martin Marietta Aggregates
50	Logan	Lgn-15	IM-453	C. E. Duff & Son, Inc.
51	Logan	Lgn-2	IM-494	Shelly Materials, Inc.
52	Lucas	Ls-1	IM-575	Hanson Aggregates Midwest, Inc.
53	Lucas	Ls-3	IM-580	Hanson Aggregates Midwest, Inc.
54	Lucas	Ls-2	IM-503	Stoneco, Inc.
56	Mahoning	Mg-54	IM-93	Honey Creek Stone Co.
57	Mahoning	Mg-608	IM-4	ESSROC Cement Corp.
59	Marion	Mn-2	IM-423	J. M. Hamilton & Sons Co., Inc., National Lime & Stone Co.
60	Marion	Mn-3	IM-168	National Lime & Stone Co.
61	Marion	Mn-1	IM-250	Shelly Materials, Inc.
62	Mercer	Mr-1	IM-592	Stoneco, Inc.
63	Mercer	Mr-2	IM-430	Morrow Gravel Co.
64	Miami	Mi-1	IM-382	Piqua Materials, Inc.
66	Miami	Mi-502	IM-414	Barrett Paving Materials, Inc.
67	Miami	Mi-10	IM-335	C. F. Poeppelman, Inc.
70	Montgomery	My-1	IM-374	Martin Marietta Aggregates
71	Montgomery	My-23	IM-368	Martin Marietta Aggregates
72	Montgomery	My-58	IM-330	Southdown Inc.
73	Morgan	Mon-600	D-1034	Central Ohio Coal Co.
75	Muskingum	Mum-106	IM-297	Chesterhill Stone Co.
78	Muskingum	Mum-104	IM-277	Sidwell Materials, Inc.
80	Noble	Ne-86	IM-70	Zerger's Quarry
82	Ottawa	Oa-6	IM-296	White Rock Quarry, LCC
83	Ottawa	Oa-14	IM-320	Stoneco, Inc.
84	Ottawa	Oa-7	IM-440	Lafarge North America
85	Ottawa	Oa-1, Oa-1A	IM-292	Graymont Dolime (OH) Inc., Stansley Mineral Resources
86	Paulding	Pg-7		Hanson Aggregates Midwest, Inc.
87	Paulding	Pg-1	IM-513	Lafarge Corp.
88	Paulding	Pg-2	IM-481	Stoneco, Inc.
89	Perry	Py-235	IM-515	Maxville Quarries, Inc.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

LIMESTONE/DOLOMITE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
91	Pike	Pke-13	IM-213	Latham Limestone, Inc.
92	Pickaway	Pky-4	IM-209	The Melvin Stone Co., LLC
95	Preble	Pre-5	IM-447	Wysong Stone Co.
98	Putnam	Pm-2	IM-570	Putnam Stone Co.
101	Sandusky	Sy-5	IM-0259	Precision Aggregates III, LLC
102	Sandusky	Sy-1	IM-537	Martin Marietta Magnesia Specialties, Inc.
103	Sandusky	Sy-4	IM-381	Millersville Lime Inc.
104	Sandusky	Sy-3	IM-282	Millersville Lime Inc.
106	Seneca	Sa-2	IM-352	Carmeuse Ohio Inc.
107	Seneca	Sa-1	IM-347	Hanson Aggregates Midwest, Inc.
108	Seneca	Sa-3	IM-349	Hanson Aggregates Midwest, Inc.
109	Seneca	Sa-8	IM-313	North Shore Stone Quarries, Inc.
110	Shelby	Shy-17	IM-389	Miami River Stone Co.
111	Shelby	Shy-16	IM-411	Miami River Stone Co.
112	Shelby	Shy-15	IM-387	Barrett Paving Materials, Inc.
117	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
119	Union	Un-1	IM-208	Shelly Materials, Inc.
120	Union	Un-2	IM-236	Shelly Materials, Inc.
121	Van Wert	Vt-3	IM-495	Stoneco, Inc.
122	Van Wert	Vt-7	IM-642	Ridge Township Quarry
123	Van Wert	Vt-1	IM-500	Suever Stone Co., Inc.
129	Wood	Wd-5	IM-473	Custar Stone Co.
130	Wood	Wd-1	IM-548	MacRitchie Materials, Inc.
131	Wood	Wd-6	IM-480	Stoneco, Inc.
132	Wood	Wd-11	IM-475	Stoneco, Inc.
133	Wyandot	Wt-3	IM-298	McCarthy Stone Quarry, Olen Corp.
134	Wyandot	Wt-1	IM-405	National Lime & Stone Co.
135	Wyandot	Wt-8	IM-273	Wyandot Dolomite, Inc.
147	Guernsey, Muskingum	Gy-309	IM-1030	King Limestone, Inc.
148	Vinton	Vn-190	D-0761	Quality Stone Co.
149	Hancock	Hk-7	IM-1002	National Lime & Stone Co.
152	Belmont	Bt-1190	IM-1089	Sidwell Materials, Inc.
154	Franklin	Fn-43	IM-188	Olen Corp.
156	Hardin	Hdn-S	IM-1034	C. E. Duff & Son, Inc.
159	Lawrence	Le-B	IM-1188, D-0746	Belville Mining Co., Inc.
160	Lucas	Ls-12	IM-953	Barrett Paving Materials, Inc.
162	Mahoning	Mg-EM	IM-1056	ESSROC Cement Corp.
163	Monroe	Me-C	IM-1088	Christman Quarry
164	Monroe	Me-509	IM-1094	Rubel Quarry, Inc.
167	Noble	Ne-S	IM-913	Sharon Stone Co.
168	Perry	Py-343	IM-1061	Maxville Quarries, Inc.
170	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
171	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
173	Adams	Ads-H	IM-805	Waterland Trucking Service, Inc.
174	Erie	Ee-K	IM-727	Kellstone, Inc.
175	Highland	Hd-M	IM-1170	Martin Marietta Aggregates
176	Jefferson	Jfn-K	IM-1164	K.C.C.I.
177	Miami	Mi-BPM	IM-1169	Barrett Paving Materials, Inc.
178	Montgomery	My-Q	IM-860	Quarry Trails
179	Noble	Ne-B	IM-897	B & N Coal, Inc.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

LIMESTONE/DOLOMITE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
180	Ottawa	Oa-18	IM-635	Fox Stone Products, Inc.
181	Tuscarawas	Ts-B	IM-49	Belden Brick Co.
182	Vinton	Vn-193		Quality Stone Co.
183	Wood	Wd-14	IM-1157	Precision Aggregate, Inc.
184	Brown	Bn-EC	IM-1195	Hanson Aggregates Davon, Inc.
185	Muskingum	Mum-907	IM-1200	Pleasant Valley Limestone
186	Muskingum	Mum-SB	IM-1212, IM-1269	Sidwell Materials, Inc.
187	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
188	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
191	Tuscarawas	Ts-BB	IM-1221	Belden Brick Co.
192	Columbiana	Ca-BIM	IM-1271	Buckeye Industrial Mining Co.
194	Noble	Ne-K	IM-1254	King Quarries, Inc.
195	Belmont	Bt-N	IM-1283	Sidwell Materials, Inc.
196	Hancock	Hk-A	IM-1299	National Lime & Stone Co., Stansley Mineral Resources
197	Noble	Ne-K1	IM-1292	King Quarries, Inc.
198	Ottawa	Oa-BC	IM-1288	Baycliffs Corp.
199	Ross	Rs-MC1	IM-1298	The Melvin Stone Co., LLC
200	Tuscarawas	Ts-BJ	IM-1285	Blue Jay Enterprises of Ts. Co., Inc.
201	Belmont	Bt-B	D-998	Sidwell Materials, Inc.
202	Greene	Ge-8	IM-364	Southdown Inc.
203	Muskingum	Mum-SD	IM-1313	Sidco Development, Inc.
205	Stark	Sk-208	D-1015	ENZ, Inc.
206	Tuscarawas	Ts-1939	IM-47	Belden Brick Co.
207	Tuscarawas	Ts-520	IM-214	Blue Jay Enterprises of Ts. Co., Inc.
209	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
210	Carroll	Cl-TC	IM-1319	TCNC Industries, Inc.
211	Hamilton	Hmn-GR	IM-1363	Gray Road Fill, Inc.
212	Mahoning	Mg-L	IM-1353	Lafarge North America
213	Shelby	Shy-SC1	IM-2017	Barrett Paving Materials, Inc.
214	Tuscarawas	Ts-S2	IM-1356	Sidco Development, Inc.
216	Clark	Ck-501	IM-340	Demmy Construction, Inc.
217	Greene	Ge-M	IM-2052	The Melvin Stone Co., LLC
218	Hardin	Hdn-N	IM-2072	National Lime & Stone Co.
219	Highland	Hd-D	IM-2071	Hanson Aggregates Davon, Inc.
220	Highland	Hd-O	IM-2056	Ohio Asphaltic Limestone Corp.
221	Highland	Hd-O1	IM-2068	Ohio Asphaltic Limestone Corp.
222	Hocking	Hg-M	IM-2057	Maxville Quarries, Inc.
224	Shelby	Shy-SS	IM-438	Miami River Stone Co.
225	Stark	Sk-205	D-1144	ENZ, Inc.
226	Greene	Ge-Q	IM-2090	The Quarry, LLC
227	Hamilton	Hmn-CE	IM-2113	Carlisle Equipment Group L.P.
228	Mahoning	Mg-EF	IM-2093, IM-2101	East Fairfield Coal Co.
229	Muskingum	Mum-SW	IM-2092	Sidwell Materials, Inc.
230	Noble	Ne-C1	IM-2134	Central Ohio Coal Co.
231	Putnam	Pm-N	IM-0479	National Lime & Stone Co.
232	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

SAND AND GRAVEL DREDGING OPERATION △

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
1	Lake Erie	Ee-dredge		Erie Sand & Gravel Co.
2	Lake Erie	Lke-dredge		Osborne Materials Co.

SAND AND GRAVEL ▲

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
6	Ashland	Ald-9	IM-745	Bartley & Bolin Excavating
8	Ashland	Ald-7	IM-392	Young's Sand & Gravel Co.
9	Ashtabula	Asa-10	IM-198	Frye Sand & Gravel, Inc.
10	Ashtabula	Asa-14	IM-563	Janson's Soil Service, Inc.
14	Ashtabula	Asa-12	IM-1130	Nelson Sand & Gravel, Inc.
15	Ashtabula	Asa-15	IM-783	R. W. Sidley, Inc.
19	Athens	As-588	IM-630	Black Top Contracting, Inc.
21	Athens	As-1161	IM-97	East Clayton Asphalt, Inc.
23	Auglaize	Ae-23	IM-508	Joseph Sand & Gravel, Inc.
24	Auglaize	Ae-30	IM-598	National Lime & Stone Co.
25	Auglaize	Ae-16	IM-595	Quality Ready Mix, Inc.
26	Belmont	Bt-74	IM-288	Tri-State Asphalt Products
28	Butler	Br-36	IM-649	Bill D. Colwell
29	Butler	Br-5	IM-153	Martin Marietta Aggregates
30	Butler	Br-35	IM-200	Martin Marietta Aggregates
31	Butler	Br-48	IM-562	Broshear Contractors, Inc.
32	Butler	Br-50	IM-739	Dingledine Basic Materials, Inc.
33	Butler	Br-14	IM-147	Martin Marietta Aggregates
34	Butler	Br-29	IM-149	Martin Marietta Aggregates
37	Butler	Br-40	IM-493	Gaston Bowling, Inc.
38	Butler	Br-52	IM-814	Shamrock Materials, Inc.
39	Butler	Br-15	IM-316	Mecco, Inc.
41	Butler	Br-6	IM-177	Moraine Materials Co., Inc.
42	Butler	Br-3	IM-719	Roy B. Schweitzer
44	Butler	Br-47	IM-111	Watson Gravel, Inc.
45	Butler	Br-38	IM-218	Welch Sand & Gravel, Inc.
47	Carroll	Cl-204	IM-554	Oneida Sand & Gravel, Inc.
48	Champaign	Cpn-1	IM-371	Morrow Gravel Co.
49	Champaign	Cpn-21	IM-616	D & W Sand & Gravel
50	Champaign	Cpn-22	IM-889	Mechanicsburg Sand & Gravel, Inc.
51	Champaign	Cpn-20	IM-482	Moore's Excavating Co.
52	Clark	Ck-13	IM-366	Martin Marietta Aggregates
54	Clark	Ck-502	IM-375	Demmy Sand & Gravel
57	Clark	Ck-3	IM-463	Enon Washed Sand & Gravel Co.
58	Clark	Ck-25	IM-358	Shelly Materials, Inc.
59	Clermont	Ct-9	IM-526	Barrett Paving Materials, Inc.
61	Clermont	Ct-7	IM-432	Kipp's Gravel Co., Inc.
68	Columbiana	Ca-881	IM-611	X L Sand & Gravel
69	Coshocton	Cn-718	IM-227	Apache Aggregate & Paving Co.
70	Coshocton	Cn-783	IM-717	Apache Aggregate & Paving Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
71	Coshocton	Cn-694	IM-293	Shelly Materials, Inc.
72	Coshocton	Cn-624	IM-243	Shady Bend Sand & Gravel
80	Darke	Dke-4	IM-433	Foureman's Sand & Gravel, Inc.
81	Darke	Dke-10	IM-326	Hollinger Excavating
83	Erie	Ee-18	IM-676	Erie Materials, Inc.
84	Erie	Ee-29		Jarrett Sand Co.
92	Fairfield	Fd-13	IM-848, IM-1331	Shelly Materials, Inc.
94	Franklin	Fn-36	IM-302	Agg Rok Materials
95	Franklin	Fn-6	IM-185	Martin Marietta Aggregates
96	Franklin	Fn-23	IM-183	Martin Marietta Aggregates
97	Franklin	Fn-14	IM-832	D.B.M. Materials, LLC
98	Franklin	Fn-52	IM-191	JP Sand & Gravel Co.
100	Franklin	Fn-11	IM-234	Mason's Sand & Gravel Co./George C. Smith
101	Franklin	Fn-24	IM-266	S & S Aggregate, Inc.
108	Geauga	Gea-29	IM-215	Haueter Sand & Gravel, Inc.
109	Geauga	Gea-35	IM-321	Teague Gravel Co., Inc.
110	Greene	Ge-33	IM-379	Martin Marietta Aggregates
112	Greene	Ge-4	IM-394	Hilltop Basic Resources, Inc.
115	Greene	Ge-36	IM-305	Phillips Sand & Gravel
117	Greene	Ge-10	IM-518	Xenia Sand, Gravel, & Asphalt Co.
118	Hamilton	Hmn-37	IM-170	Martin Marietta Aggregates
120	Hamilton	Hmn-54	IM-710	Ashcraft Sand & Gravel, Inc.
121	Hamilton	Hmn-44	IM-120	Crosby Gravel, Inc.
123	Hamilton	Hmn-50	IM-205, IM-1139	James Bunnell, Inc.
124	Hamilton	Hmn-59	IM-812, IM-815	James Bunnell, Inc.
127	Hamilton	Hmn-5	IM-148	Martin Marietta Aggregates
128	Hamilton	Hmn-11	IM-133	Dravo Lime, Inc.
131	Hamilton	Hmn-68	IM-747	Watson Gravel, Inc.
132	Hamilton	Hmn-46	IM-396	Eaton Sand & Gravel Co.
134	Hamilton	Hmn-71	IM-771	Martin Marietta Aggregates
135	Hamilton	Hmn-17	IM-295	Harrison Sand & Gravel Co.
137	Hamilton	Hmn-67	IM-529	R. L., Ltd.
139	Hamilton	Hmn-10	IM-226	Rack Sand, Inc.
141	Hamilton	Hmn-28	IM-353	Roy B. Schweitzer
142	Hamilton	Hmn-60	IM-761	Watson Gravel, Inc.
143	Hamilton	Hmn-42	IM-823	Welch Sand & Gravel, Inc.
144	Hamilton	Hmn-48	IM-220	Welch Sand & Gravel, Inc.
151	Hocking	Hg-262	IM-41	Hocking Valley Concrete, Inc.
152	Hocking	Hg-301	IM-458	Muskingum River Gravel Co.
153	Holmes	Hs-82	IM-707	Menuez Bros. Sand & Gravel, Inc.
154	Holmes	Hs-511	IM-1048, IM-1240	Feikert Sand & Gravel, Inc.
161	Knox	Kx-16	IM-793	Olen Corp.
162	Knox	Kx-5	IM-884, IM-1307	Small's Sand & Gravel, Inc.
163	Knox	Kx-3	IM-300	United Aggregates, Inc.
165	Knox	Kx-15	IM-967	Small's Sand & Gravel, Inc.
166	Lake	Lke-7	IM-162	R. W. Sidley, Inc.
167	Lawrence	Le-430	IM-844	B & L Sand Co.
170	Lawrence	Le-426	IM-856	Burlington Sand & Gravel Co.
174	Licking	Lg-2	IM-184	Doug Mill
176	Licking	Lg-31	IM-246	Olen Corp.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
179	Licking	Lg-10	IM-217	Van Wey Sand & Gravel, Inc.
182	Logan	Lgn-31	IM-454	C. E. Duff & Son, Inc.
183	Logan	Lgn-39	IM-887	C. E. Duff & Son, Inc.
189	Logan	Lgn-6	IM-459	Neer's Sand & Gravel
191	Lorain	Ln-12	IM-731	Guy Schieve
195	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
196	Mahoning	Mg-632	IM-808	Solomon's Mines, Inc.
197	Marion	Mn-16	IM-171	Fleming Construction Co., Inc.
198	Marion	Mn-4	IM-290	Martin Marietta Aggregates
203	Medina	Ma-20	IM-448	Baker Sand, Inc.
206	Medina	Ma-22	IM-425, IM-442, IM-650, IM-651	Seville Sand & Gravel, Inc.
209	Meigs	Ms-205	IM-30	Martin Marietta Aggregates
211	Meigs	Ms-301	IM-619	Meigs County Commissioners
212	Meigs	Ms-298	IM-32	Shelly Materials, Inc.
217	Miami	Mi-501		New Carlisle Sand & Gravel Co.
219	Miami	Mi-3	IM-462, IM-658	Martin Marietta Aggregates
221	Miami	Mi-9	IM-408	Wise Gravel
222	Miami	Mi-4	IM-472	Fenner Sand & Gravel, Inc.
224	Montgomery	My-66	IM-677	Martin Marietta Aggregates
225	Montgomery	My-65	IM-594	Broadway Sand & Gravel, Inc.
232	Montgomery	My-19	IM-401, IM-916	Hilltop Basic Resources, Inc.
233	Montgomery	My-52	IM-348	Miller Bros. Gravel, Inc.
236	Montgomery	My-55	IM-571	Taylorsville Rd. Hardfill
238	Montgomery	My-61	IM-468	Tipp Stone Co., Inc.
239	Montgomery	My-41	IM-360	Moraine Materials Co., Inc.
240	Morgan	Mon-588	IM-35	Chesterhill Stone Co.
242	Morrow	Mw-10	IM-258	Chesterville Sand & Gravel Co., Inc.
244	Muskingum	Mum-799	IM-317, IM-264	Shelly Materials, Inc.
247	Muskingum	Mum-228	IM-421	Muskingum River Gravel Co.
248	Muskingum	Mum-216	IM-689	James Bros., Inc.
252	Pike	Pke-26	IM-142	Valley Materials Co.
254	Pike	Pke-30	IM-786	South Central Sand & Gravel
255	Pike	Pke-24	IM-222	Hanson Aggregates Davon, Inc.
256	Portage	Pe-50	IM-96	Beck Sand & Gravel, Inc.
257	Portage	Pe-15	IM-104	Muskingum River Gravel Co.
258	Portage	Pe-9	IM-119	Oscar Brugmann Sand & Gravel, Inc.
260	Portage	Pe-84	IM-868	Twinsburg Development Corp
261	Portage	Pe-45	IM-139	R. A. Cruise Sand & Gravel, Inc.
262	Portage	Pe-56	IM-127	Hilltop Aggregate, Inc.
264	Portage	Pe-10	IM-138	Hugo Sand Co.
265	Portage	Pe-63	IM-82	Jefferson Materials Co.
268	Portage	Pe-40	IM-190	Lakeside Sand & Gravel Co.
272	Portage	Pe-39	IM-1078	Miller Sand & Gravel, Inc.
273	Portage	Pe-85	IM-700	Rockwell Sand & Gravel, Inc.
274	Portage	Pe-60	IM-78	Schloss Materials Co.
275	Portage	Pe-18	IM-193	Sober Sand & Gravel Co.
276	Portage	Pe-36	IM-90	Solon Excavators Sand & Gravel, Inc.
277	Portage	Pe-68	IM-660, IM-1047, IM-1107, IM-1124	Lafarge North America
280	Portage	Pe-64	IM-1017	Rainbow Sand & Gravel, Inc.
281	Portage	Pe-59	IM-210	S & S Aggregate, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
282	Portage	Pe-67	IM-202	S & S Aggregate, Inc.
284	Preble	Pre-7	IM-306	Southern Ohio Aggregates, Inc.
285	Preble	Pre-4	IM-477	Wysong Gravel Co.
286	Preble	Pre-6	IM-478	Wysong Gravel Co.
287	Richland	Rd-4	IM-279, IM-1255	D. H. Bowman & Sons, Inc.
289	Richland	Rd-18	IM-670	Ganges Gravel Co.
290	Richland	Rd-14	IM-436	John L. Garber Materials, Inc.
292	Richland	Rd-5	IM-470	S & S Aggregate, Inc.
303	Scioto	So-98	IM-474	E. E. Blair Construction Co.
304	Scioto	So-83	IM-211	Cunningham Asphalt Paving, Inc.
305	Scioto	So-78		E. H. Schilling & Sons, Inc.
306	Scioto	So-79	IM-221	ATS Enterprises
311	Shelby	Shy-17	IM-389	Miami River Stone Co.
312	Shelby	Shy-13	IM-412	Miami River Stone Co.
314	Shelby	Shy-11	IM-743	Barrett Paving Materials, Inc.
315	Shelby	Shy-18	IM-388	Barrett Paving Materials, Inc.
316	Stark	Sk-N	IM-156	Northern Ohio Paving Co.
318	Stark	Sk-681	IM-164	Central-Allied Enterprises, Inc.
319	Stark	Sk-689	IM-173	Central-Allied Enterprises, Inc.
320	Stark	Sk-694	IM-858	A. J. Diana Sons, Inc.
325	Stark	Sk-607	IM-102	Central-Allied Enterprises, Inc.
326	Stark	Sk-165	IM-192	Oster Sand & Gravel, Inc.
327	Summit	St-52	IM-900	Flesher Sand & Gravel, Inc.
333	Summit	St-24	IM-239	Riverside Sand & Gravel Co., Inc.
336	Summit	St-44	IM-178	S & S Aggregate, Inc.
340	Trumbull	Tl-12	IM-131	Samco, Inc.
343	Tuscarawas	Ts-1826	IM-88	Soehnlen Bros. Sand & Gravel, Inc.
344	Tuscarawas	Ts-1771	IM-77	Spring Industries, Inc.
346	Tuscarawas	Ts-111	IM-55	Stewart & Reichman, Inc.
347	Tuscarawas	Ts-69	IM-51	Stocker Sand & Gravel Co.
348	Tuscarawas	Ts-125	IM-50	Stocker Sand & Gravel Co.
349	Warren	Wan-38	IM-615	Martin Marietta Aggregates
352	Warren	Wan-41	IM-629	Carl E. Oeder & Sons Sand & Gravel
356	Warren	Wan-47	IM-846	C. & S. Contractors, Inc.
364	Washington	Wn-55	IM-669	Beverly Slag Co.
365	Washington	Wn-508	IM-57	Briggs Sand & Gravel, Inc.
367	Washington	Wn-38	IM-701	Muskingum River Gravel Co.
369	Washington	Wn-510	IM-25	Trout Sand & Gravel Co.
372	Wayne	We-11	IM-547	Prairie Lane Sand & Gravel Co.
373	Wayne	We-7	IM-471	Rupp Construction, Inc.
374	Wayne	We-15	IM-398	Zollinger Sand & Gravel Co.
375	Williams	Ws-6	IM-497	Stoneco, Inc.
376	Williams	Ws-9	IM-498	Stoneco, Inc.
377	Williams	Ws-11	IM-509, IM-661	Weber Sand & Gravel, Inc.
378	Williams	Ws-14	IM-614	Dennis Winzeler
379	Wyandot	Wt-4	IM-520	Precision Aggregate, Inc.
380	Wyandot	Wt-15	IM-376, IM-551	National Lime & Stone Co.
382	Wyandot	Wt-17	IM-604	Kirby's Sand & Gravel, Inc.
385	Clark	Ck-501	IM-340	Demmy Construction, Inc.
386	Stark	Sk-203	IM-654	American Sand & Gravel, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
387	Portage	Pe-95	IM-212	American Sand & Gravel, Inc.
389	Tuscarawas	Ts-1976	IM-1235	Goshen Sand & Gravel
390	Miami	Mi-T	IM-696	Lloyd B. Fry
391	Warren	Wan-B	IM-679	Little Miami Sand & Gravel
395	Scioto	So-100	IM-950	Hanson Aggregates Davon, Inc.
401	Fairfield	Fd-14	IM-933	Paul D. Beery Trucking Co.
403	Greene	Ge-40	IM-923	R.J. Martin Service & Excavating
404	Greene	Ge-42	IM-954	Martin Marietta Aggregates
405	Greene	Ge-32	IM-400	Martin Marietta Aggregates
407	Hamilton	Hmn-69	IM-969	Watson Gravel, Inc.
408	Knox	Kx-17	IM-968	Small's Sand & Gravel, Inc.
409	Richland	Rd-20	IM-617	Bartley & Bolin Excavating
412	Ashland	Ald-15	IM-944	Young's Sand & Gravel Co.
413	Ashtabula	Asa-18	IM-949	Joe Simak & Sons Trucking, Inc.
415	Geauga	Gea-9	IM-132	Soltis Sand & Gravel
416	Holmes	Hs-96	IM-997	Spring Run Gravel
417	Huron	Hrn-16	IM-975	Erie Blacktop, Inc.
419	Licking	Lg-504	IM-991	Gary Roberts Excavating
420	Logan	Lgn-36	IM-1007	C. E. Duff & Son, Inc.
423	Marion	Mn-19	IM-990	Fleming Construction Co., Inc.
424	Monroe	Me-508	IM-1000	Ohio-West Virginia Excavation
427	Summit	St-54	IM-934	R. & S., Inc.
428	Tuscarawas	Ts-2001	IM-1004	Newton Asphalt Paving, Inc.
429	Warren	Wan-46	IM-842	Little Miami Sand & Gravel
430	Warren	Wan-50	IM-1006	L & I Natural Resources, Inc.
432	Washington	Wn-54	IM-383	Atlas Towing Co.
435	Stark	Sk-173	IM-879	Allied Corp., Inc.
437	Clark	Ck-7	IM-449	City of Springfield
438	Coshocton	Cn-828	IM-1026	William Albert, Inc.
440	Gallia	Ga-626	IM-1046	Cremeans Concrete & Supply, Inc.
441	Greene	Ge-38	IM-333	Martin Marietta Aggregates
444	Logan	Lgn-12	IM-1071	C. E. Duff & Son, Inc.
446	Miami	Mi-12	IM-467	Tipp Stone Co., Inc.
447	Miami	Mi-504	IM-1032	Miller Bros. Gravel, Inc.
448	Muskingum	Mum-262	IM-422	Muskingum River Gravel Co.
451	Portage	Pe-89	IM-1142	Green Oaks Potting Products, Inc.
452	Ross	Rs-M	IM-114	Muskingum River Gravel Co.
453	Stark	Sk-241	IM-582	Lafarge North America
455	Stark	Sk-243	IM-908	American Sand & Gravel, Inc.
458	Athens	As-595	IM-1083	Cochran Transportation Services, Inc.
459	Athens	As-W	IM-979	Olen Corp.
460	Butler	Br-S	IM-1053	Southern Ohio Aggregates, Inc.
461	Clark	Ck-28	IM-1100, IM-2120	Barrett Paving Materials, Inc.
463	Columbiana	Ca-982	IM-1108	Leetonia Sand & Gravel Co., Inc.
465	Franklin	Fn-58	IM-1023	Olen Corp.
466	Gallia	Ga-O	IM-1028	Ours Sand & Gravel
467	Hamilton	Hmn-AS	IM-1106	Allgeier & Son, Inc.
468	Hamilton	Hmn-D	IM-1079	Martin Marietta Aggregates
470	Holmes	Hs-J	IM-1043	Holmes Supply Corp.
472	Lucas	Ls-G	IM-1090	H. T. Griffin Excavating, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
474	Madison	Mdn-11	IM-1063	Tuffco Sand & Gravel, Inc.
475	Mahoning	Mg-630	IM-1091	Wallace Road Sand & Gravel
480	Pickaway	Pky-H	IM-1039	William A. Hoffman, Jr.
481	Pickaway	Pky-R	IM-993	The Melvin Stone Co., LLC
482	Portage	Pe-61	IM-1064	Red Brush Peat Co.
483	Portage	Pe-92	IM-522	Don Wartko Construction, Inc.
488	Preble	Pre-9	IM-1095	Loxley Aggregates, Inc.
490	Ross	Rs-27	IM-1098	Shelly Materials, Inc.
491	Ross	Rs-H	IM-1052	Haubeil & Sons Asphalt & Materials, Inc.
493	Shelby	Shy-S	IM-1005	Sidney Sand & Gravel Co.
494	Shelby	Shy-SC	IM-1018	Spring Creek Corp.
495	Stark	Sk-M	IM-1031	Massillon Materials, Inc.
496	Summit	St-55	IM-589	Alden Sand & Gravel Co.
500	Tuscarawas	Ts-2018	IM-1076	JBM Ltd.
501	Warren	Wan-M	IM-728, IM-1065	Morrow Gravel Co.
502	Warren	Wan-M1	IM-1051	Morrow Gravel Co.
503	Warren	Wan-M2	IM-837	Morrow Gravel Co.
504	Washington	Wn-1007	IM-1042	Mark Williams Blacktop Co., Inc.
506	Williams	Ws-T	IM-1022	Stoneco, Inc.
508	Ashland	Ald-G	IM-1121	Joyce A. Good
509	Ashland	Ald-16	IM-1120	Bartley & Bolin Excavating
517	Geauga	Gea-N	IM-1123	Newbury Sand & Gravel
518	Geauga	Gea-TK	IM-902	T & K Kuhnle Co.
520	Hamilton	Hmn-C	IM-1132	Allgeier & Son, Inc.
521	Hamilton	Hmn-AS1	IM-797	Allgeier & Son, Inc.
523	Hocking	Hg-329	IM-1112	Kilbarger Construction, Inc.
528	Portage	Pe-SSC	IM-318	Sunshine Sand Co.
533	Washington	Wn-1008	IM-1111	Grimes Excavating
534	Washington	Wn-1009	IM-525	Mark Williams Blacktop Co., Inc.
535	Wayne	We-23	IM-1136	Buckeye Excavating Development, Inc.
537	Clermont	Ct-11	IM-665	Dravo Lime, Inc.
538	Columbiana	Ca-993	IM-1180	Willowbrook Sand & Gravel
539	Columbiana	Ca-351	IM-634	Inland South Aggregates
541	Fairfield	Fd-16	IM-1156	James E. Downard
544	Gallia	Ga-J	IM-1145	Jaymar, Inc.
545	Geauga	Gea-H	IM-510	Haueter Sand & Gravel, Inc.
546	Greene	Ge-46	IM-1149	Don Thompson Excavating, Inc.
547	Greene	Ge-R	IM-829	Richards Service Garage
548	Greene	Ge-47	IM-751	M. J. Coates Construction Co., Inc.
549	Greene	Ge-W	IM-645	Joann O. Weddle
550	Greene	Ge-G	IM-655	M. J. Coates Construction Co., Inc.
551	Hamilton	Hmn-S	IM-746	Southern Ohio Aggregates, Inc.
552	Hamilton	Hmn-SO	IM-720	Southern Ohio Aggregates, Inc.
553	Hardin	Hdn-H	IM-864	Norman Harpster
559	Meigs	Ms-L	IM-1159	Jaymar, Inc.
560	Meigs	Ms-308	IM-1174	Jaymar, Inc.
561	Montgomery	My-CW	IM-878	Carter & Carter, Inc.
565	Pickaway	Pky-W	IM-1176	Gene T. Wilson
568	Portage	Pe-101	IM-1154	D & K Materials, Inc.
569	Portage	Pe-SM	IM-499	Schloss Materials Co.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
570	Portage	Pe-L	IM-154	Lucky Sand & Gravel Co.
571	Preble	Pre-AAC	IM-779	U.S. Aggregates, Inc.
573	Ross	Rs-E	IM-1168	David E. Edgington
575	Ross	Rs-P	IM-122	Mark E. Scott
576	Scioto	So-B	IM-705	Boone Coleman Construction, Inc.
577	Shelby	Shy-SS	IM-438	Miami River Stone Co.
578	Stark	Sk-MW	IM-1171	Central-Allied Enterprises, Inc.
579	Stark	Sk-W	IM-867	Ralph C. Wagner & Sons
581	Stark	Sk-R	IM-697	Oster Sand & Gravel, Inc.
582	Stark	Sk-SI	IM-588	Spring Industries, Inc.
584	Trumbull	Tl-16	IM-1158	Nick's Trucking
586	Tuscarawas	Ts-2036	IM-1155	Oster Sand & Gravel, Inc.
588	Tuscarawas	Ts-SI	IM-569	L & M Mineral Co.
589	Warren	Wan-7	IM-151	Embro, Inc.
590	Washington	Wn-1010	IM-1163	M & J Sand & Gravel, Inc.
591	Wyandot	Wt-K	IM-943	Kirby's Sand & Gravel, Inc.
593	Ashtabula	Asa-20	IM-1198	Kinsman Materials, LTD.
595	Cuyahoga	Cya-42	IM-686	Boyas Excavating, Inc.
597	Lake	Lke-C	IM-1215	Cashen, Inc.
598	Lake	Lke-D	IM-1187	De Milta Sand & Gravel, Inc.
600	Licking	Lg-W	IM-1213	Eagle Material Supply Ltd.
602	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
605	Portage	Pe-102	IM-1184	GANS Ltd.
606	Ross	Rs-T	IM-1189	Tackett Builders
607	Stark	Sk-BE	IM-1202	Beaver Excavating, Inc.
608	Stark	Sk-HS	IM-1193	Heiser Sand & Gravel Corp.
609	Stark	Sk-HS1	IM-1203	Heiser Sand & Gravel Corp.
610	Stark	Sk-1017	IM-1186	National Aggregates, Inc.
611	Trumbull	Tl-C	IM-1190	Center West Enterprises, Inc.
613	Wayne	We-24	IM-1211	E. A. Construction, Inc.
615	Portage	Pe-98	IM-1219, IM-1231	Johnson Road Sand & Gravel
616	Ashland	Ald-Y	IM-1216	Young's Sand & Gravel Co.
619	Champaign	Cpn-25	IM-1227	Moore's Excavating Co.
620	Clark	Ck-29	IM-1233	Moore's Excavating Co.
622	Fulton	Ftn-M	IM-1246	Al Mackey Enterprises, Inc.
623	Geauga	Gea-43	IM-1230	Solon Excavators Sand & Gravel, Inc.
625	Lake	Lke-CIR	IM-1243	C.I.R., Inc.
627	Pickaway	Pky-C	IM-1223	George J. Igel & Co., Inc.
628	Portage	Pe-OB	IM-1241	Oscar Brugmann Sand & Gravel, Inc.
631	Stark	Sk-CA	IM-1234	Central-Allied Enterprises, Inc.
633	Williams	Ws-21	IM-1225	Thiel Construction Co.
634	Williams	Ws-22	IM-1222	Walcott Sand & Gravel Corp.
635	Ashtabula	Asa-C	IM-1278	Clemson Excavating, Inc.
636	Columbiana	Ca-S	IM-1258	Solomon's Mines, Inc.
637	Erie	Ee-27	IM-608	Erie Blacktop, Inc.
639	Fulton	Ftn-M1	IM-1275	Al Mackey Enterprises, Inc.
640	Hamilton	Hmn-ARH	IM-1273	Watson Gravel, Inc.
641	Hamilton	Hmn-G	IM-1270	Golsch Construction, Inc.
642	Hamilton	Hmn-JC	IM-1267	Joe E. Carter
646	Lucas	Ls-M	IM-1261	Al Mackey Enterprises, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
647	Morgan	Mon-L	IM-1266	Link Trucking Co., Inc.
648	Pickaway	Fn-C	IM-1265	Louis Johnson
650	Ashtabula	Asa-F	IM-1289	Frye Sand & Gravel, Inc.
651	Ashtabula	Asa-M	IM-1301	Mathews Sand & Gravel
653	Columbiana	Ca-W	IM-1279	Carl Walter
654	Fulton	Ftn-BL1	IM-1282	B & L Excavating
655	Fulton	Ftn-M2	IM-1294	Al Mackey Enterprises, Inc.
656	Highland	Hd-L	IM-1297	LaMar Sand & Fill, Ltd.
657	Hocking	Hg-HV	IM-1284	Hocking Valley Mulch
658	Licking	Lg-S	IM-1281	Redskin Transport LLC
661	Portage	Pe-LS	IM-1293	Lakeside Sand & Gravel Co.
663	Scioto	So-BT	IM-1286	Big T Mining
664	Scioto	So-DGM	IM-1280	D.G.M., Inc.
665	Williams	Ws-N	IM-1291	Andy Nixon Contractors, Inc.
666	Wood	Wd-14	IM-1157	Precision Aggregate, Inc.
667	Butler	Br-57		Watson Gravel, Inc.
668	Coshocton	Cn-C	IM-1311	County Line Concrete & Supply Co.
669	Logan	Lgn-B	IM-1309	Boyd Excavating
670	Holmes	Hs-C	IM-1303	Craigton Shale Co.
671	Pickaway	Pky-DC	IM-1316	Darby Creek Excavating, Inc.
672	Fulton	Ftn-SI	IM-1308	Sandco, Inc.
673	Portage	Pe-B1	IM-1296	Blue Stone Sand & Gravel, Inc.
674	Portage	Pe-B2	IM-1305	Blue Stone Sand & Gravel, Inc.
675	Washington	Wn-C	IM-1315	Chesterhill Stone Co.
676	Portage	Pe-M	IM-1312	Mills Rock, Sand, & Soil, Inc.
677	Ashtabula	Asa-ST	IM-1349, IM-2130	Joe Simak & Sons Trucking, Inc.
678	Fulton	Ftn-SA	IM-1335	Sandman Trucking, Inc.
679	Hocking	Hg-HA	IM-1320	Harden Agricultural Lime & Reclm. Svs., Inc.
680	Hamilton	Hmn-P	IM-1333	Martin Marietta Aggregates
681	Lucas	Ls-AM	IM-1318	Al Mackey Enterprises, Inc.
682	Lucas	Ls-GB	IM-1323	Gary L. Brown
683	Lucas	Ls-ME	IM-1345	Moon Enterprises, Inc.
685	Stark	Sk-M1	IM-1332	Massillon Materials, Inc.
686	Summit	St-DC	IM-1346	Donald A. Coy
687	Tuscarawas	Ts-MM	IM-1324	Massillon Materials, Inc.
688	Warren	Wan-MV	IM-1329	Miami View Mining Co., Ltd.
689	Portage	Pe-BA	IM-1327	Ballentine Excavation Co.
690	Fulton	Ftn-H	IM-1336	Hunter Land Development
691	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
692	Huron	Hrn-M	IM-1338	Marta Track Constructors, Inc.
693	Pike	Pke-M	IM-1325	Morrow Gravel Co.
694	Pike	Pke-V	IM-1330	Valley Materials Co.
695	Fairfield	Fd-VJ	IM-1339	Van Johnson Construction, Inc.
696	Fulton	Ftn-W	IM-2118	Wylie and Sons Landscaping
699	Richland	Rd-TB	IM-1343	The Terry Byrne Mining Co.
700	Hamilton	Hmn-NB	IM-1337	New Baltimore CDD Landfill, Ltd.
701	Ashtabula	Asa-JS	IM-1360	Joe Simak & Sons Trucking, Inc.
702	Athens	As-BT	IM-1350	Black Top Contracting, Inc.
703	Carroll	Cl-PD	IM-1352	Power Development Corp.
704	Clark	Ck-A	IM-1359	American Excavating, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
705	Columbiana	Ca-XL	IM-1347	XL Sand & Gravel
707	Knox	Kx-S	IM-2000	Small's Sand & Gravel, Inc.
708	Lucas	Ls-ST	IM-2001	Sandman Trucking, Inc.
709	Lucas	Ls-T	IM-2012	E. H Taylor, Inc.
710	Portage	Pe-A	IM-1362	American Sand & Gravel, Inc.
712	Tuscarawas	Ts-S2	IM-1356	Sidco Development, Inc.
713	Washington	Wn-SS	IM-2006	Sharon Stone Co.
714	Allen	An-W	IM-2069	Ward Materials, Inc.
715	Ashtabula	Asa-ST1	IM-2023	Joe Simak & Sons Trucking, Inc.
716	Butler	Br-B	IM-2029	Broshear Contractors, Inc.
717	Carroll	Cl-O	IM-2082	Oster Sand & Gravel, Inc.
718	Clark	Ck-B	IM-2026	Brett Baisden
719	Clark	Ck-LG	IM-2073	Louis A. Green and Associates
720	Columbiana	Ca-H	IM-2027	Harvest Sand & Gravel, Inc.
721	Columbiana	Ca-H1	IM-2033	Hartley Gravel
722	Coshocton	Cn-SR	IM-2065	Stewart & Reichman, Inc.
723	Coshocton	Cn-WA	IM-2036	William Albert, Inc.
724	Crawford	Cd-G	IM-0693	Gibson Sand & Gravel Co.
725	Fulton	Ftn-BL2	IM-2025	B & L Excavating
726	Gallia	Ga-JE	IM-2034	Jaclib Enterprises, Inc.
728	Knox	Kx-DH	IM-2078	Olen Corp.
729	Licking	Lg-KMA	IM-2043	K. M. A. Services
730	Logan	Lgn-J	IM-2053	Betty Sewell and Rebecca Johnson
731	Logan	Lgn-L	IM-2064	Logan Construction
732	Lucas	Ls-BE	IM-2054	Bihn Excavating, Inc.
733	Lucas	Ls-ST1	IM-2060	Sandman Trucking, Inc.
734	Montgomery	My-B	IM-2044	Barrett Paving Materials, Inc.
735	Morgan	Mon-CS1	IM-2049	Chesterhill Stone Co.
736	Pickaway	Pky-RR	IM-2040	Roy M. Roush
737	Portage	Pe-H	IM-2039	Hilltop Aggregate, Inc.
738	Portage	Pe-J	IM-2051	Janson & Sons Corp.
739	Portage	Pe-R	IM-2037	Rockwell Sand & Gravel, Inc.
740	Portage	Pe-V	IM-2061	Valley Brook Sand & Gravel, Inc.
741	Preble	Pre-T	IM-2036	Thomas Sand & Gravel
742	Shelby	Shy-SC1	IM-2017	Barrett Paving Materials, Inc.
743	Tuscarawas	Ts-K	IM-2050	Krizman Enterprises
744	Tuscarawas	Ts-N	IM-2032	J. E. Niclozakes Co.
745	Portage	Pe-P	IM-1322	Patrick Excavating, Inc.
746	Ashtabula	Asa-N1	IM-2102	Nelson Sand & Gravel, Inc.
747	Clark	Ck-H	IM-2089	Hilltop Basic Resources, Inc.
748	Clark	Ck-Th	IM-2133	Terry A. Hoppes
749	Coshocton	Cn-WL	IM-2127	Walhonding Sand & Gravel
750	Fulton	Ftn-NW	IM-2138	Northwest Ohio Property Developments, Ltd.
751	Fulton	Ftn-SA1	IM-2136	Sandman Trucking, Inc.
752	Hocking	Hg-L	IM-2117	Lancaster Limestone
753	Lucas	Ls-M1	IM-2137	Al Mackey Enterprises, Inc.
754	Lucas	Ls-W	IM-2098	Wylie and Sons Landscaping
755	Morgan	Mon-M	IM-0718	Muskingum River Gravel Co.
756	Muskingum	Mum-LB	IM-2106	LUB, Inc.
757	Portage	Pe-S1	IM-2126	Solon Excavators Sand & Gravel, Inc.

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SAND AND GRAVEL (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
758	Ross	Rs-G	IM-2099	Gillum Bros. Excavating
759	Stark	Sk-RO	IM-2084	Dale B. Rohr
760	Tuscarawas	Ts-ST	IM-2125	Stocker Sand & Gravel Co.
761	Washington	Wn-C1	IM-2088	Chesterhill Stone Co.
762	Wyandot	Wt-J	IM-2119	JALIP, LTD.
763	Wyandot	Wt-N	IM-2123	National Lime & Stone Co.
764	Jackson	Jkn-367	D-594, D-968, D-1083	Waterloo Coal Co., Inc.
768	Sandusky	Sy-5	IM-0259	Precision Aggregates III, LLC

SANDSTONE/CONGLOMERATE ▼

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
4	Coshocton	Cn-13	IM-397	Briar Hill Stone Co.
5	Coshocton	Cn-659	IM-232	Briar Hill Stone Co.
6	Coshocton	Cn-686	IM-504	Briar Hill Stone Co.
7	Coshocton	Cn-692	IM-294	Briar Hill Stone Co.
8	Coshocton	Cn-695	IM-402	Briar Hill Stone Co.
13	Cuyahoga	Cya-42	IM-686	Boyas Excavating, Inc.
14	Erie	Ee-21	IM-416	Cleveland Quarries
17	Geauga	Gea-3	IM-89	Best Sand Corp.
18	Geauga	Gea-1	IM-163	R. W. Sidley, Inc.
19	Holmes	Hs-49	IM-418	Briar Hill Stone Co.
20	Huron	Hrn-8	IM-268	Mesenburg Bros., Inc.
23	Knox	Kx-12	IM-445	Briar Hill Stone Co.
24	Knox	Kx-1	IM-269	Oglebay Norton Industrial Sands, Inc.
27	Lorain	Ln-3	IM-415	Cleveland Quarries
30	Mahoning	Mg-62	IM-599	Gwin Contracting Co.
34	Ross	Rs-16	IM-172	Best Sand Corp.
36	Scioto	So-48	IM-140	Waller Bros. Stone Co.
37	Scioto	So-76	IM-141	Waller Bros. Stone Co.
38	Scioto	So-82	IM-158	Waller Bros. Stone Co.
41	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
42	Tuscarawas	Ts-1660	IM-68	U.S. Silica Co.
43	Washington	Wn-45	IM-125	Alan Stone Co., Inc.
44	Coshocton	Cn-815	IM-939	Briar Hill Stone Co.
45	Pike	Pke-31	IM-835	Best Sand Corp.
46	Coshocton	Cn-809	IM-909	Briar Hill Stone Co.
47	Columbiana	Ca-970	IM-1024	M & M Builders Supply Co.
48	Perry	Py-344	IM-1014	Oglebay Norton Industrial Sands, Inc.
49	Summit	St-24	IM-239	Riverside Sand & Gravel Co., Inc.
50	Geauga	Gea-N	IM-1123	Newbury Sand & Gravel
51	Belmont	Bt-1193	IM-1117	Alan Stone Co., Inc.
53	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
54	Tuscarawas	Ts-2032	IM-1141	J. L. & Son Excavating, Inc.
55	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
56	Belmont	Bt-1190	IM-1089	Sidwell Materials, Inc.
57	Columbiana	Ca-888	IM-1181	D. & D. Mining Co.

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SANDSTONE/CONGLOMERATE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
58	Geauga	Gea-S	IM-161	R. W. Sidley, Inc.
60	Lake	Lke-K	IM-859	Keeney Sand & Stone, Inc.
62	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
64	Wayne	We-26	IM-690, IM-1210	Mt. Eaton Reclamation, Inc.
65	Columbiana	Ca-982	IM-1108	Leetonia Sand & Gravel Co,, Inc.
66	Lorain	Ln-14	IM-1205	Golden Cresent Construction, Inc.
68	Summit	St-60	IM-1206	Ohio Bulk Transfer Co.
70	Portage	Pe-9	IM-119	Oscar Brugmann Sand & Gravel, Inc.
71	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.
72	Columbiana	Ca-S	IM-1258	Solomon's Mines, Inc.
73	Scioto	So-BC	IM-1252	Boone Coleman Construction, Inc.
74	Wayne	We-EA	IM-1259	E. A. Construction, Inc.
75	Lorain	Ln-J	IM-1300	Johnson Stone Products, Inc.
77	Trumbull	Tl-12	IM-131	Samco, Inc.
78	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
80	Washington	Wn-F	IM-1208	David Florence
81	Perry	Py-SU	IM-1340	Suburban South Recycling & Disposal Facility
82	Pike	Pke-S	IM-1348	Schrader and Son, Inc.
83	Fairfield	Fd-PG	IM-2086	Pine Grove Regional Facility
84	Knox	Kx-C	IM-2128	Central Alloy Processing
85	Scioto	So-W	IM-2111	Waller Bros. Stone Co.
86	Trumbull	Tl-CA	IM-2085	City Stone LLC

CLAY/SHALE □

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
1	Ashland	Ald-1	IM-334	London Tile Co.
2	Auglaize	Ae-7		Sandkuhl Clay Works, Inc.
4	Columbiana	Ca-505	IM-13, IM-936	State Line Resources, Inc.
5	Columbiana	Ca-205	IM-74	Summitville Tiles, Inc.
7	Cuyahoga	Cya-19	IM-95	Hydraulic Press Brick Co.
10	Greene	Ge-8	IM-364	Southdown Inc.
11	Harrison	Hn-152	IM-42	Bowerston Shale Co.
17	Holmes	Hs-56		Clark Clay, Inc.
19	Holmes	Hs-67	IM-3, IM-768	Holmes Limestone Co.
23	Jackson	Jkn-367	D-594, D-968, D-1083	Waterloo Coal Co., Inc.
31	Licking	Lg-501	IM-257	Bowerston Shale Co.
34	Mahoning	Mg-608	IM-4	ESSROC Cement Corp.
36	Marion	Mn-7	IM-309	Glen-Gery Corp.
38	Muskingum	Mum-776	IM-256	Bowerston Shale Co.
41	Noble	Ne-66	IM-664	Towne Square Products
42	Paulding	Pg-1	IM-513	Lafarge Corp.
53	Stark	Sk-217	D-0938	Countywide Recycling and Disposal Facility
56	Tuscarawas	Ts-1517	IM-46	Belden Brick Co.
57	Tuscarawas	Ts-1646	IM-44	Belden Brick Co.
58	Tuscarawas	Ts-1841	IM-45	Belden Brick Co.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

CLAY/SHALE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
59	Tuscarawas	Ts-1939	IM-47	Belden Brick Co.
60	Tuscarawas	Ts-1960	IM-48	Belden Brick Co.
63	Tuscarawas	Ts-1818	IM-9	Kimble Clay & Limestone Co.
64	Tuscarawas	Ts-1884	IM-6	L & M Mineral Co.
65	Tuscarawas	Ts-1914	D-0701	L & M Mineral Co.
67	Tuscarawas	Ts-1557, Ts-1558	IM-52	Stone Creek Brick Co.
71	Tuscarawas	Ts-540	IM-28	Zoar Mining Co.
76	Stark	Sk-235	IM-945	Holmes Limestone Co.
77	Tuscarawas	Ts-1982	IM-621	L & M Mineral Co.
79	Columbiana	Ca-947	IM-935	Dome Minerals, Inc.
81	Athens	As-594		Athens Hocking Reclamation Center
82	Ashtabula	Asa-14	IM-563	Janson's Soil Service, Inc.
85	Tuscarawas	Ts-520	IM-214	Blue Jay Enterprises of Ts. Co., Inc.
86	Geauga	Gea-9	IM-132	Soltis Sand & Gravel
87	Athens	As-595	IM-1083	Cochran Transportation Services, Inc.
88	Coshocton	Cn-828	IM-1026	William Albert
89	Erie	Ee-32	IM-1077	Speer Brothers, Inc.
90	Greene	Ge-44		Southdown Inc.
92	Lake	Lke-M	IM-1059	Mitchell Transport, Inc.
93	Lawrence	Le-B	IM-1188, D-0746	Belville Mining Co., Inc.
99	Pike	Pke-26	IM-142	Valley Materials Co.
101	Preble	Pre-9	IM-1095	Loxley Aggregates, Inc.
105	Belmont	Bt-1190	IM-1089	Sidwell Materials, Inc.
106	Columbiana	Ca-970	IM-1024	M & M Builders Supply Co.
107	Mahoning	Mg-EM	IM-1056	ESSROC Cement Corp.
108	Perry	Py-338	IM-1092	Bearcreek Clay Co.
109	Harrison	Hn-B	IM-1020	Bowerston Shale Co.
111	Holmes	Hs-96	IM-997	Spring Run Gravel
114	Richland	Rd-R	IM-1035	Richland Moulded Brick Co.
116	Portage	Pe-61	IM-1064	Red Brush Peat Co.
118	Mahoning	Mg-631	IM-1103	East Fairfield Coal Co.
122	Muskingum	Mum-904	IM-1127	Valley Clay Mining Co.
123	Stark	Sk-246	IM-2024	American Landfill, Inc.
128	Athens	As-533	IM-17	Waterloo Coal Co., Inc.
130	Columbiana	Ca-348	IM-976	D. & D. Mining Co.
135	Mahoning	Mg-632	IM-808	Solomon's Mines, Inc.
136	Ottawa	Oa-19	IM-1153	Brush Wellman, Inc.
137	Perry	Py-344	IM-1014	Ogleby Norton Industrial Sands, Inc.
138	Perry	Py-S1	IM-1183	Swingle Drilling, Inc.
144	Wayne	We-26	IM-690, IM-1210	Mt. Eaton Reclamation, Inc.
146	Stark	Sk-247	D-0929	Buckeye Industrial Mining Co.
147	Tuscarawas	Ts-B	IM-49	Belden Brick Co.
148	Knox	Kx-K	IM-870	Knox County Board of Commissioners
150	Ross	Rs-T	IM-1189	Tackett Builders
151	Tuscarawas	Ts-H1	IM-927	Holmes Limestone Co.
152	Washington	Wn-1010	IM-1163	M & J Sand & Gravel, Inc.
153	Champaign	Cpn-20	IM-482	Moore's Excavating Co.
155	Fairfield	Fd-16	IM-156	James E. Downard
156	Lucas	Ls-13	IM-492	Seaway Sand & Stone, Inc.
157	Montgomery	My-CW	IM-878	Carter & Carter, Inc.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

CLAY/SHALE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
158	Montgomery	My-W	IM-1207	Weidle Sand & Gravel, Inc.
161	Portage	Pe-89	IM-1142	Green Oaks Potting Products, Inc.
162	Stark	Sk-BE	IM-1202	Beaver Excavating, Inc.
163	Washington	Wn-F	IM-1208	David Florence
164	Columbiana	Ca-888	IM-1181	D. & D. Mining Co.
165	Wayne	We-25	IM-1209	Craigton Shale Co.
166	Ashtabula	Asa-18	IM-949	Joe Simak & Sons Trucking, Inc.
173	Perry	Py-V	IM-1245	Valley Clay Mining Co.
174	Stark	Sk-K	IM-1236	Koch-Glitsch, Inc.
177	Tuscarawas	Ts-BB	IM-1221	Belden Brick Co.
178	Columbiana	Ca-987	D-0928	Buckeye Industrial Mining Co.
179	Wayne	We-11	IM-547	Prairie Lane Sand & Gravel Co.
182	Lawrence	Le-PH	IM-1268	P & H Construction
184	Trumbull	Tl-12	IM-131	Samco, Inc.
185	Wayne	We-EA	IM-1259	E. A. Construction, Inc.
186	Columbiana	Ca-BIM	IM-1271	Buckeye Industrial Mining Co.
188	Harrison	Hn-CD	D-1105	Waste Management/Chambers Development of Ohio, Inc.
189	Stark	Sk-BI	D-1043	Buckeye Industrial Mining Co.
190	Hamilton	Hmn-72	IM-1264	Rumpke Mountain Mining Co.
193	Wayne	We-15	IM-398	Zollinger Sand & Gravel Co.
194	Columbiana	Ca-S	IM-1258	Solomon's Mines, Inc.
195	Jackson	Jkn-CH2	IM-1302	Cedar Heights Clay Co.
197	Noble	Ne-S	IM-913	Sharon Stone Co.
198	Ottawa	Oa-BF	IM-1287	Browning-Ferris Industries of Ohio, Inc.
199	Portage	Pe-101	IM-1154	D & K Materials, Inc
200	Stark	Sk-B	D-1123	Buckeye Industrial Mining Co.
201	Tuscarawas	Ts-BJ	IM-1285	Blue Jay Enterprises of Ts. Co., Inc.
203	Stark	Sk-208	D-1015	ENZ, Inc.
204	Portage	Pe-84	IM-868	Twinsburg Development Corp.
205	Perry	Py-D1	IM-1304	Bearcreek Clay Co.
206	Fairfield	Fd-VJ	IM-1339	Van Johnson Construction, Inc.
207	Madison	Mdn-11	IM-1063	Tuffco Sand & Gravel, Inc.
208	Mahoning	Mg-54	IM-93	Honey Creek Stone Co.
209	Mercer	Mr-C	IM-1341	Laidlaw Waste Systems (Celina), Inc.
210	Muskingum	Mum-L	IM-1344	Luburgh Inc.
211	Portage	Pe-18	IM-193	Sober Sand & Gravel Co.
212	Portage	Pe-P	IM-1322	Patrick Excavating, Inc.
213	Perry	Py-SU	IM-1340	Suburban South Recycling & Disposal Facility
214	Huron	Hrn-M	IM-1338	Marta Track Constructors, Inc.
216	Hamilton	Hmn-NB	IM-1337	New Baltimore CDD Landfill, Ltd.
217	Defiance	De-3	IM-1351	General Motors Power Train
219	Greene	Ge-W	IM-645	Joann O. Weddle
221	Putnam	Pm-P	IM-2002	Putnam County Board of Commissioners
223	Williams	Ws-N	IM-1291	Andy Nixon Contractors, Inc.
224	Wyandot	Wt-CD	IM-2016	County Disposal (Ohio), Inc.
225	Lucas	Ls-12	IM-953	Barrett Paving Materials, Inc.
226	Athens	As-H	IM-2081	J. B. Hayes Excavating and Pipeline
227	Brown	Bn-W	IM-2076	Rumpke Waste, Inc.
228	Butler	Br-K	IM-2041	Kelchner Environmental, Inc.
229	Licking	Lg-NU	IM-2046	Nuway Services, Inc.

NUMERICAL INDEX OF OPERATORS OF MINES SHOWN ON 2001 MINERAL INDUSTRIES MAP OF OHIO, BY COMMODITY

CLAY/SHALE (cont.)

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
230	Jackson	Jkn-CH3	IM-2035	Cedar Heights Clay Co.
231	Stark	Sk-CR	IM-2020	Countywide Recycling and Disposal Facility
232	Columbiana	Ca-E	IM-2112	East Liverpool Landfill, Inc.
233	Coshocton	Cn-WL	IM-2127	Walhonding Sand & Gravel
234	Fairfield	Fd-PG	IM-2086	Pine Grove Regional Facility
235	Hamilton	Hmn-CE	IM-2113	Carlisle Equipment Group L.P.
236	Logan	Lgn-C	IM-2108	Cherokee Run Landfill
237	Stark	Sk-B4	D-2096	Buckeye Industrial Mining Co.
238	Lucas	Ls-E	IM-2116, IM-1075	Envirosafe Services of Ohio, Inc.
239	Cuyahoga	Cya-42	IM-686	Boyas Excavating, Inc.
240	Columbiana	Ca-H	IM-2027	Harvest Sand & Gravel, Inc.

SALT ◨ ⬓

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
1	Cuyahoga	Cya-30		Cargill Incorporated
2	Lake	Lke-6		Morton International, Inc.
3	Licking	Lg-45		R. H. Penick Co.
4	Summit	St-9127		Cargill Incorporated
5	Wayne	We-9129		Morton International, Inc.

GYPSUM ◆

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
1	Ottawa	Oa-2	IM-344	BPB-Celotex

PEAT ◇

Map location number	*County*	*State mine number*	*Division of Mineral Resources Management permit number*	*Name of operator*
2	Champaign	Cpn-9		Sphagnum Moss Peat Farm
4	Williams	Ws-17		Lingvai Peat Co.
7	Portage	Pe-89	IM-1142	Green Oaks Potting Products, Inc.
9	Portage	Pe-61	IM-1064	Red Brush Peat Co.
10	Montgomery	My-41	IM-360	Moraine Materials Co., Inc.

STATE OF OHIO
Bob Taft, Governor
DEPARTMENT OF NATURAL RESOURCES
Samuel W. Speck, Director
DIVISION OF GEOLOGICAL SURVEY
Thomas M. Berg, Chief

MINERAL INDUSTRIES MAP OF OHIO

2001

COMPILED BY
MARK E. WOLFE

This map is based on operators listed in the *2001 Report on Ohio mineral industries* and is intended for general reference. Assistance with locations was received from the Ohio Department of Natural Resources, Division of Mineral Resources Management.

Cartography by Lisa Van Doren

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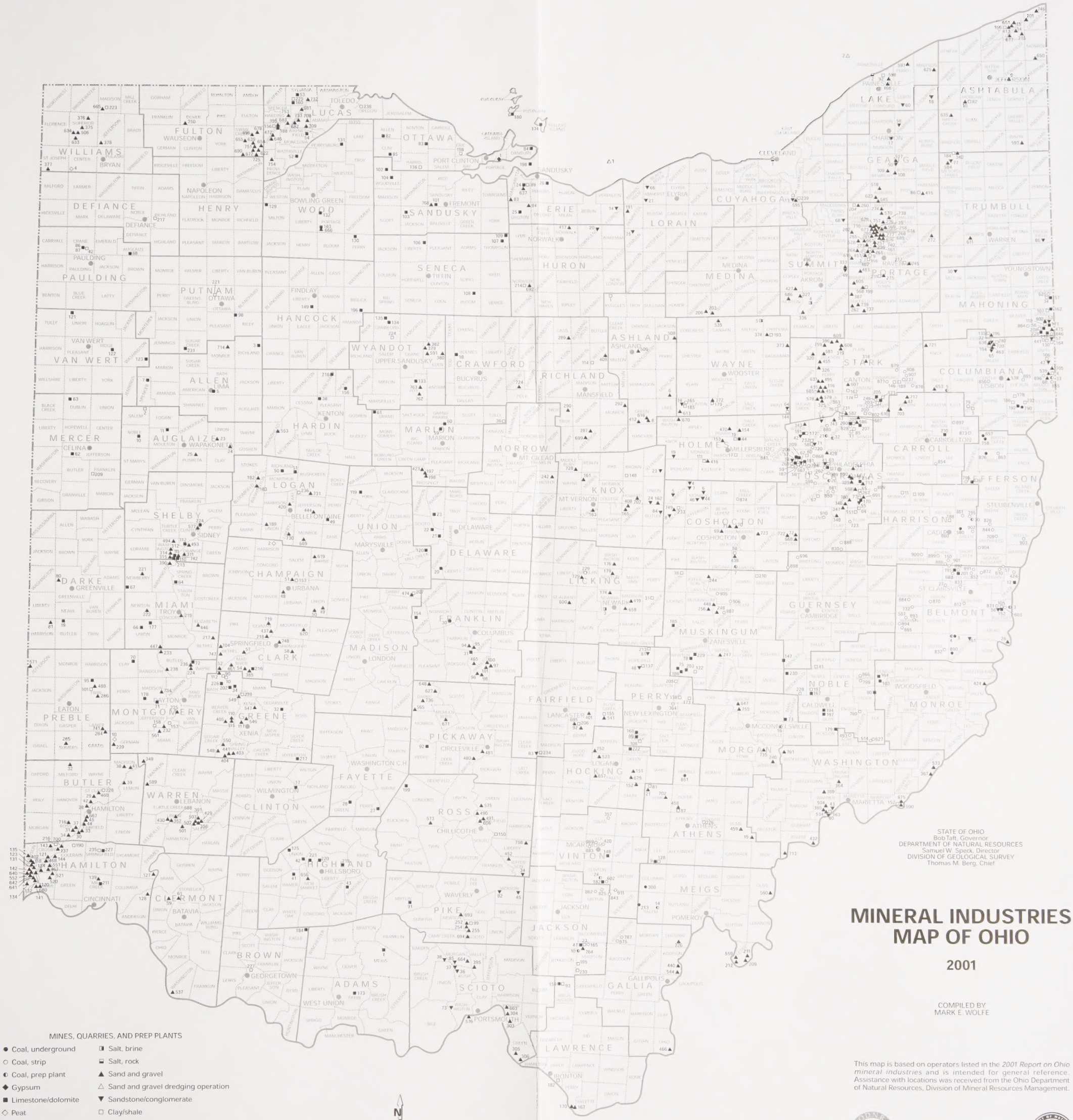

MINES, QUARRIES, AND PREP PLANTS

- ● Coal, underground
- ○ Coal, strip
- ◐ Coal, prep plant
- ◆ Gypsum
- ■ Limestone/dolomite
- ◇ Peat
- ◨ Salt, brine
- ◧ Salt, rock
- ▲ Sand and gravel
- △ Sand and gravel dredging operation
- ▼ Sandstone/conglomerate
- □ Clay/shale

Locations are approximate. Numbers opposite symbols are map-location numbers assigned to operators listed in the alphabetical directories of the Division of Geological Survey's *Report on Ohio mineral industries*. The operator of a mine or quarry may be determined from the directories by use of the map-location commodity symbol, number, and county name. A list of operators by commodity and map-location number is also provided.

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